

HARLEY-DAVIDSON®



M O T O R C Y C L E S

---

OWNER'S MANUAL

## **IMPORTANT NOTICE!**

Statements in this manual preceded by the following words are of special significance:

### **WARNING**

**Means there is the possibility of injury to yourself or others.**

### **CAUTION**

**Means there is a possibility of damage to the vehicle.**

### *NOTE*

*Other information of particular importance has been placed in italic type.*

We recommend you take special notice of these items

**Printed in the U.S.A.**



# YOUR OWNER'S MANUAL

Welcome to the Harley-Davidson Motorcycling Family! Your new Harley-Davidson motorcycle is designed and manufactured to be the finest in its field. Your Harley-Davidson motorcycle conforms to all applicable U.S. Federal Motor Vehicle Safety Standards and U.S. Environmental Protection Agency regulations effective on the date of manufacture.

This manual has been prepared to acquaint you with the operation, care and maintenance of your motorcycle, and to provide you with important safety information. Follow these instructions carefully for maximum motorcycle performance and for your personal motorcycling safety and pleasure

Your Owner's Manual contains instructions for operation and minor maintenance. Major repairs are covered in the Harley-Davidson Service Manual. Such major repairs require the attention of a skilled technician and the use of special tools and equipment. Your Harley-Davidson dealer has the facilities, experience and genuine Harley-Davidson parts necessary to properly render this valuable service. We recommend that any emission system maintenance be performed by an authorized Harley-Davidson dealer.

## WE CARE ABOUT YOU

When enjoying your Harley-Davidson motorcycle, be sure to ride safely, defensively and within the limits of the law. Ride with your headlamp on, always wear a helmet, proper eyewear and protective clothing, and insist your passenger does too. Never ride while under the influence of alcohol or drugs. Know your Harley® and read your Owner's Manual cover to cover. Protect your privilege to ride by joining the American Motorcyclist Association.

Harley-Davidson Motor Company

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Printed in U.S.A.  
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**PERSONAL INFORMATION**

Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone No. \_\_\_\_\_

**VEHICLE INFORMATION**

Vehicle Identification No. \_\_\_\_\_

Ignition Key No. \_\_\_\_\_

This owner's manual illustrates and describes features that are standard or available as extra cost options. Therefore, some of the equipment shown in this publication may not be on your motorcycle.

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# NOTES

The Touring section contains the vehicle specifications for the following Harley-Davidson models:

FLTC - Ultra .....	Ultra Tour Glide Classic
FLHTC - Ultra/1.....	Ultra Electra Glide Classic
FLHTC.....	Electra Glide Classic
FLHT .....	Electra Glide
FLHR.....	Electra Glide Road King



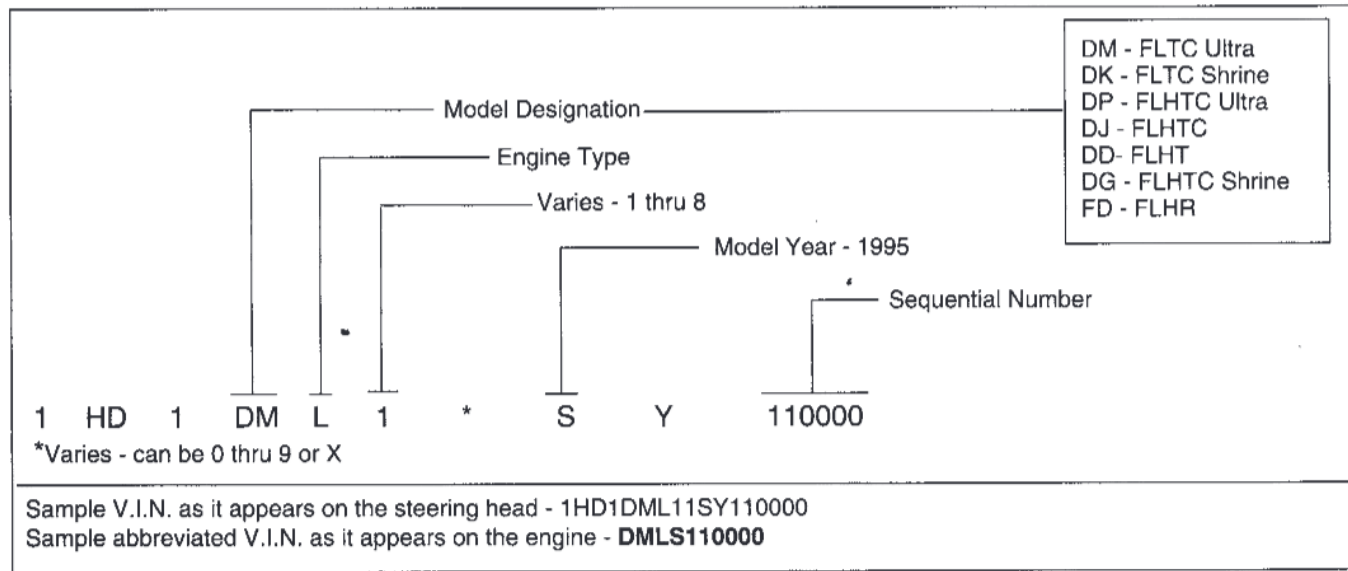
# NOTES

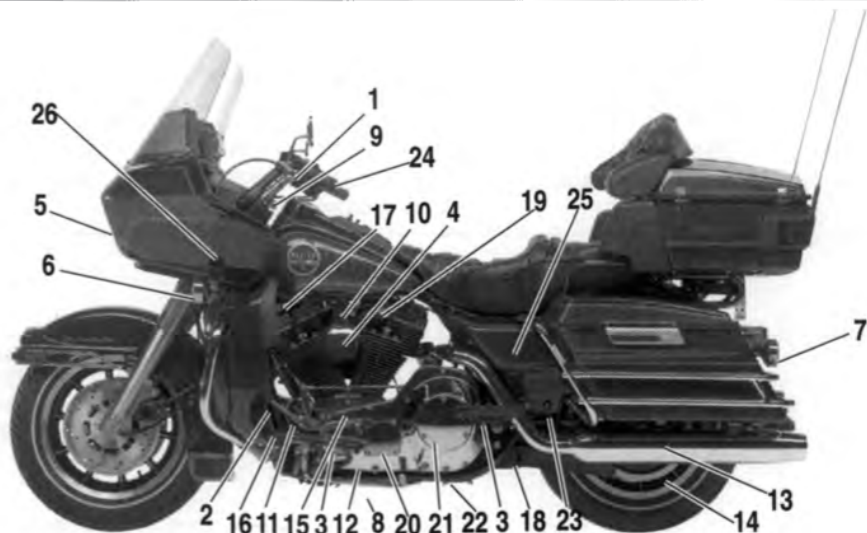
## VEHICLE IDENTIFICATION NUMBER (V.I.N.)

The full 17 digit serial, or Vehicle Identification Number (V.I.N.) is stamped on the steering head and on a label located on the right front frame downtube. An abbreviated V.I.N. is stamped on the left side crankcase above the timing hole.

### NOTE

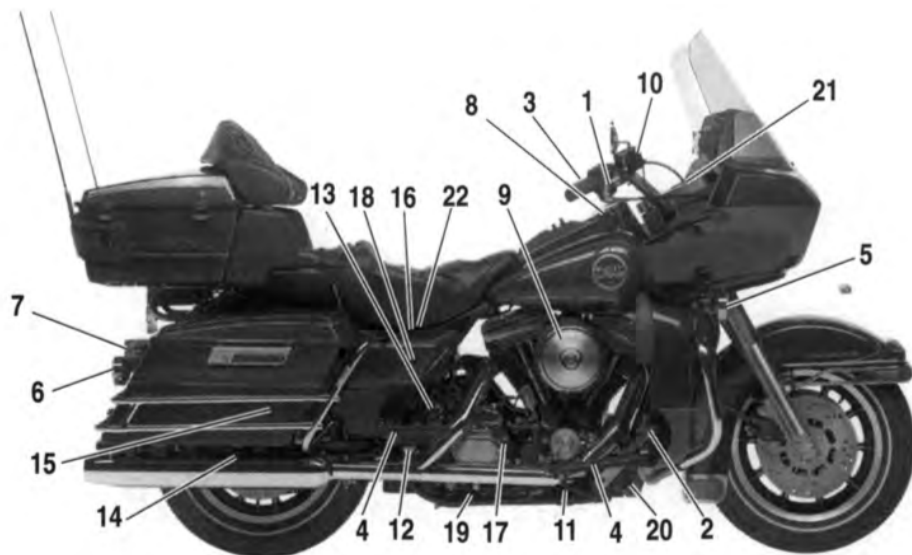
*Always give the full 17 digit Vehicle Identification Number when ordering parts or making any inquiry about your motorcycle.*





- |                                     |                                    |                                    |
|-------------------------------------|------------------------------------|------------------------------------|
| 1. Clutch hand lever                | 9. Ignition/light switch/fork lock | 18. Transmission drain plug        |
| 2. Gear shifter                     | 10. Carburetor enricher knob       | 19. Fuel supply valve              |
| 3. Footrest(s)                      | 11. Engine oil filter              | 20. Primary chain inspection cover |
| 4. Horn                             | 12. Primary chain cover            | 21. Clutch inspection cover        |
| 5. Headlamp                         | 13. Rear axle adjuster             | 22. Primary drain plug             |
| 6. Front turn signal & running lamp | 14. Rear sprocket and drive        | 23. Rear suspension air valve      |
| 7. Rear turn signal lamp            | 15. Timing inspection hole plug    | 24. Front suspension air valve     |
| 8. Jiffy stand                      | 16. Voltage regulator              | 25. Sound system fuse/filter board |
|                                     | 17. Ignition coil                  | 26. Circuit breakers and fuses     |

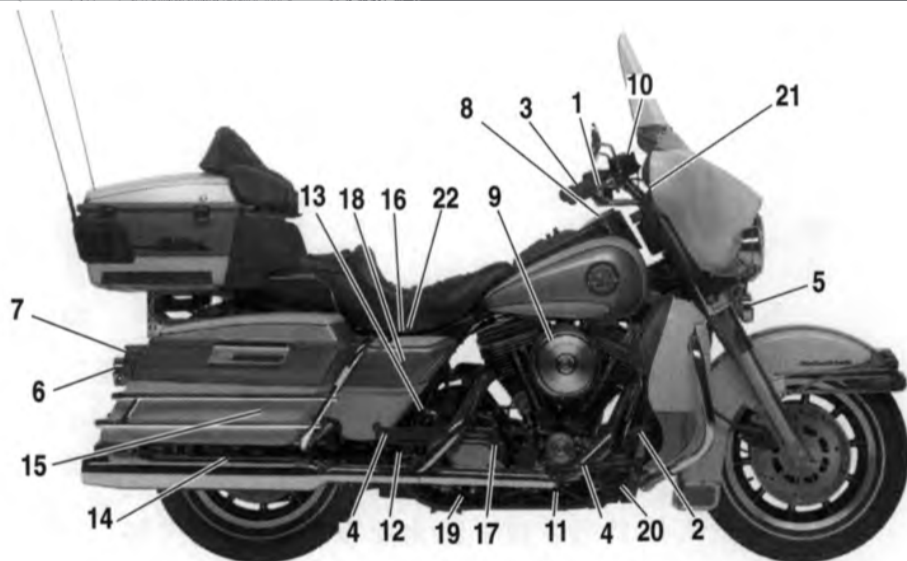
Classic Tour Glide (FLTC U) - Left Side View



- |                                     |   |                                 |
|-------------------------------------|---|---------------------------------|
| 1. Front brake hand lever           | 9. Carburetor/air cleaner                   | 16. Battery (under seat)        |
| 2. Rear brake pedal                 | 10. Front brake master cylinder & reservoir | 17. Transmission fill plug      |
| 3. Throttle control grip            | 11. Rear brake master cylinder              | 18. Ignition module             |
| 4. Footrest(s)                      | 12. Engine oil fill plug & dipstick         | 19. Engine oil tank drain       |
| 5. Front turn signal & running lamp | 13. Electric starter motor                  | 20. Rear brake fluid reservoir  |
| 6. Rear turn signal lamp            | 14. Rear axle adjuster                      | 21. Speedometer/tachometer      |
| 7. Tail/stop lamp                   | 15. Shock absorber(s)                       | 22. Acc. connector (under seat) |
| 8. Fuel filler cap                  |   |                                 |

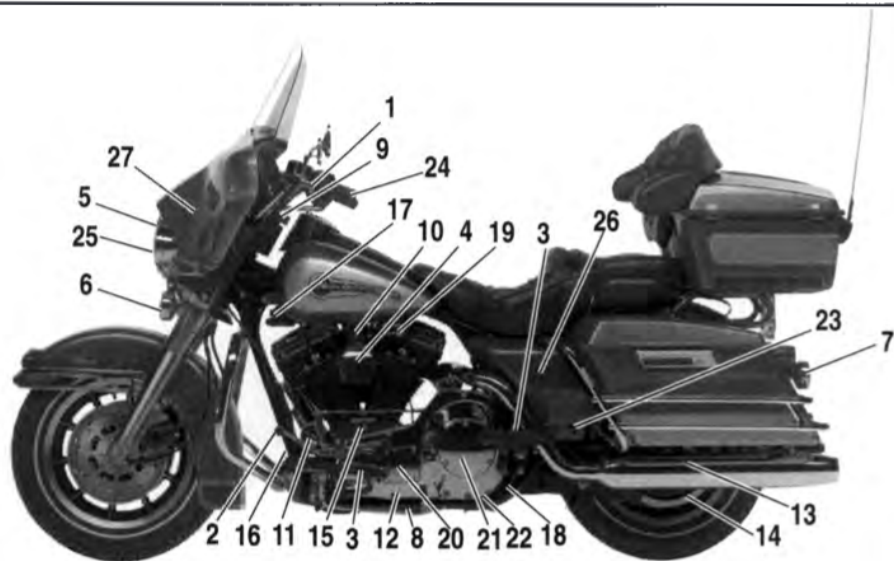
Classic Tour Glide (FLTC U) - Right Side View





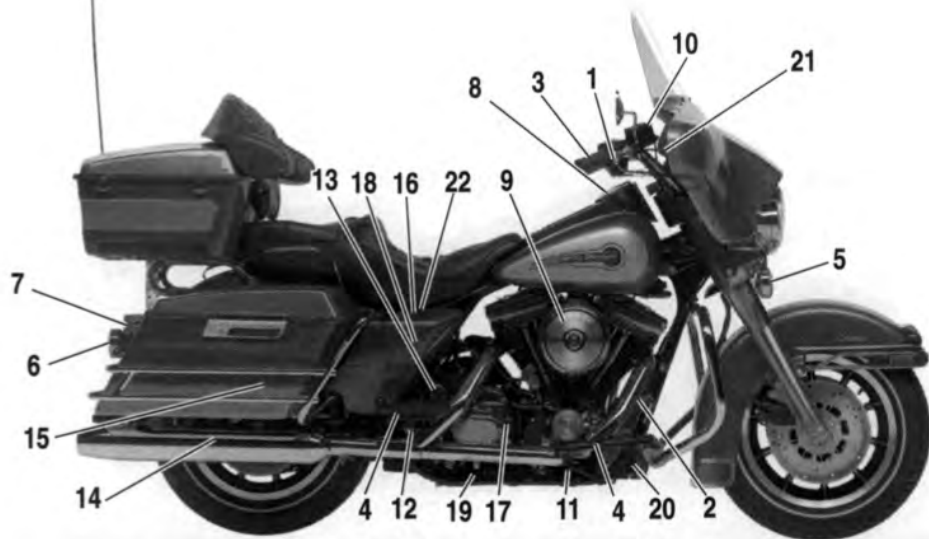
- |                                     |   |                                 |
|-------------------------------------|---|---------------------------------|
| 1. Front brake hand lever           | 9. Air cleaner                              | 16. Battery (under seat)        |
| 2. Rear brake pedal                 | 10. Front brake master cylinder & reservoir | 17. Transmission fill plug      |
| 3. Throttle control grip            | 11. Rear brake master cylinder              | 18. Ignition module             |
| 4. Footrest(s)                      | 12. Engine oil fill plug & dipstick         | 19. Engine oil tank drain       |
| 5. Front turn signal & running lamp | 13. Electric starter motor                  | 20. Rear brake fluid reservoir  |
| 6. Rear turn signal lamp            | 14. Rear axle adjuster                      | 21. Speedometer/tachometer      |
| 7. Tail/stop lamp                   | 15. Shock absorber(s)                       | 22. Acc. connector (under seat) |
| 8. Fuel filler cap                  |   |                                 |

Classic Electra Glide (FLHTC U, FLHTC U-I) - Right Side View



- |                                     |                                 |                                    |
|-------------------------------------|---------------------------------|------------------------------------|
| 1. Clutch hand lever                | 10. Carburetor enricher knob    | 19. Fuel supply valve              |
| 2. Gear shifter                     | 11. Engine oil filter           | 20. Primary chain inspection cover |
| 3. Footrest(s)                      | 12. Primary chain cover         | 21. Clutch inspection cover        |
| 4. Horn                             | 13. Rear axle adjuster          | 22. Primary drain plug             |
| 5. Headlamp                         | 14. Rear sprocket and drive     | 23. Rear suspension air valve      |
| 6. Front turn signal & running lamp | 15. Timing inspection hole plug | 24. Front suspension air valve     |
| 7. Rear turn signal lamp            | 16. Voltage regulator           | 25. Passing lamps                  |
| 8. Jiffy stand                      | 17. Ignition coil               | 26. Sound system fuse board        |
| 9. Ignition/light switch/fork lock  | 18. Transmission drain plug     |                                    |

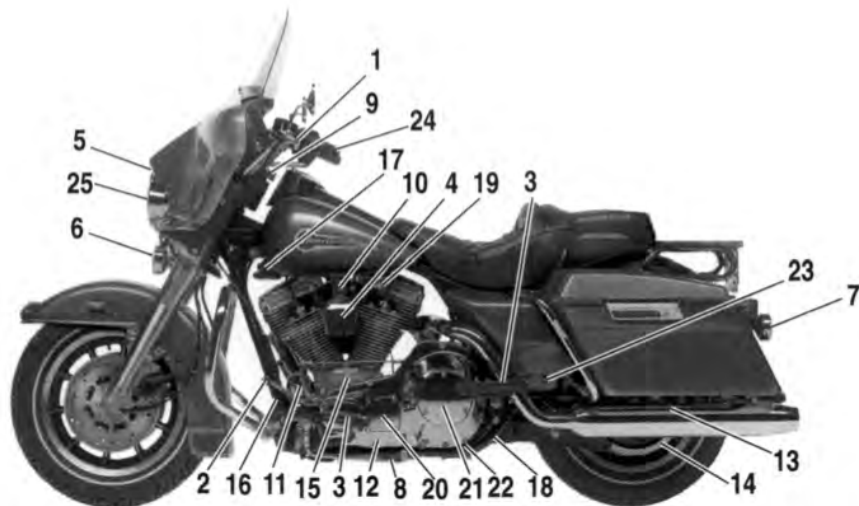
Electra Glide Classic (FLHTC) - Left Side View



- |                                     |   |                                 |
|-------------------------------------|---|---------------------------------|
| 1. Front brake hand lever           | 9. Carburetor/air cleaner                   | 16. Battery (under seat)        |
| 2. Rear brake pedal                 | 10. Front brake master cylinder & reservoir | 17. Transmission fill plug      |
| 3. Throttle control grip            | 11. Rear brake master cylinder              | 18. Ignition module             |
| 4. Footrest(s)                      | 12. Engine oil fill plug & dipstick         | 19. Engine oil tank drain       |
| 5. Front turn signal & running lamp | 13. Electric starter motor                  | 20. Rear brake fluid reservoir  |
| 6. Rear turn signal lamp            | 14. Rear axle adjuster                      | 21. Speedometer/tachometer      |
| 7. Tail/stop lamp                   | 15. Shock absorber(s)                       | 22. Acc. connector (under seat) |
| 8. Fuel filler cap                  |   |                                 |

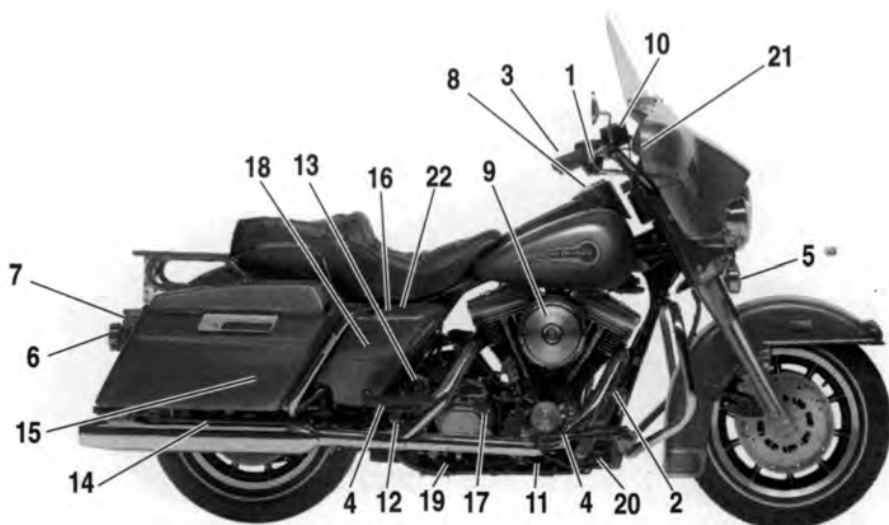
Electra Glide Classic (FLHTC) - Right Side View





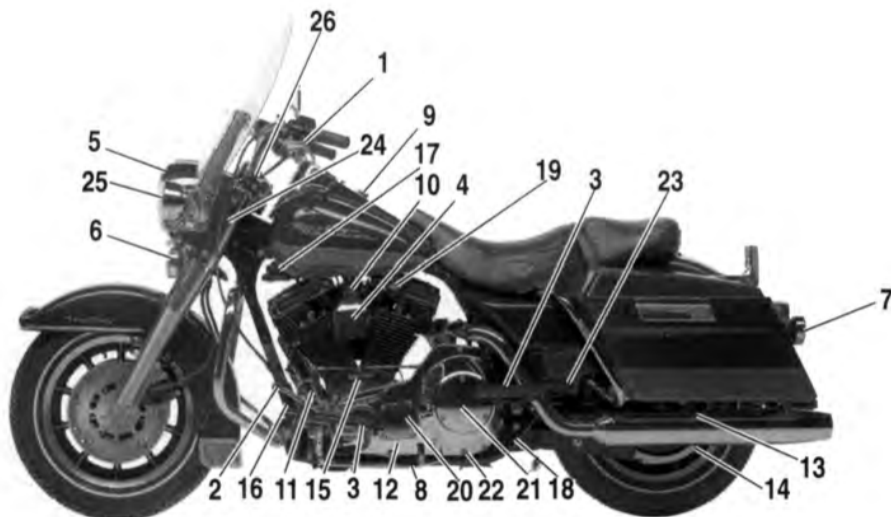
- |                                     |                                 |                                    |
|-------------------------------------|---------------------------------|------------------------------------|
| 1. Clutch hand lever                | 10. Carburetor enricher knob    | 18. Transmission drain plug        |
| 2. Gear shifter                     | 11. Engine oil filter           | 19. Fuel supply valve              |
| 3. Footrest(s)                      | 12. Primary chain cover         | 20. Primary chain inspection cover |
| 4. Horn                             | 13. Rear axle adjuster          | 21. Clutch inspection cover        |
| 5. Headlamp                         | 14. Rear sprocket and drive     | 22. Primary drain plug             |
| 6. Front turn signal & running lamp | 15. Timing inspection hole plug | 23. Rear suspension air valve      |
| 7. Rear turn signal lamp            | 16. Voltage regulator           | 24. Front suspension air valve     |
| 8. Jiffy stand                      | 17. Ignition coil               | 25. Passing lamps                  |
| 9. Ignition/light switch/fork lock  |                                 |                                    |

Electra Glide (FLHT) - Left Side View



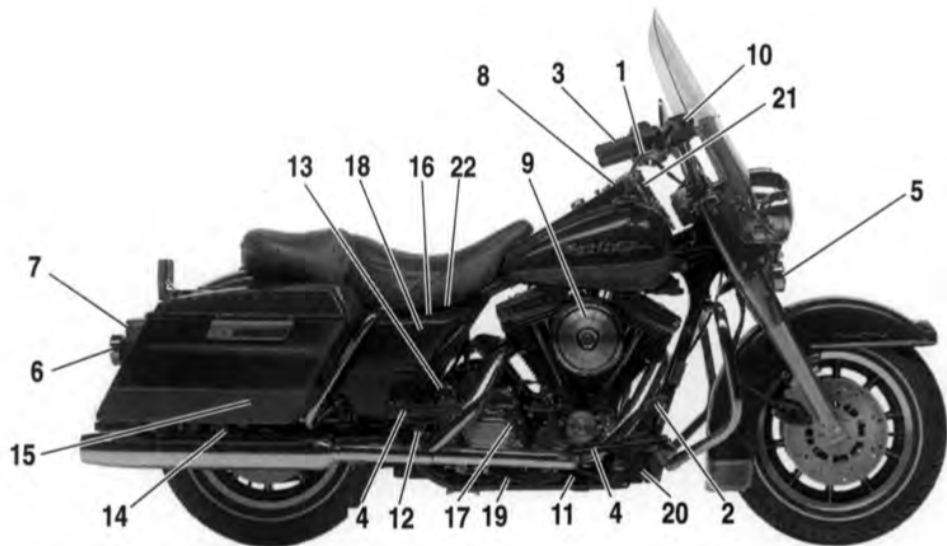
- |                                     |   |   |
|-------------------------------------|---|---|
| 1. Front brake hand lever           | 9. Carburetor/air cleaner                   | 16. Battery (under seat)                          |
| 2. Rear brake pedal                 | 10. Front brake master cylinder & reservoir | 17. Transmission fill plug                        |
| 3. Throttle control grip            | 11. Rear brake master cylinder              | 18. Ignition module                               |
| 4. Footrest(s)                      | 12. Engine oil fill plug & dipstick         | 19. Engine oil tank drain                         |
| 5. Front turn signal & running lamp | 13. Electric starter motor                  | 20. Rear brake fluid reservoir (under side cover) |
| 6. Rear turn signal lamp            | 14. Rear axle adjuster                      | 21. Speedometer/tachometer                        |
| 7. Tail/stop lamp                   | 15. Shock absorber(s)                       | 22. Acc. connector (under seat)                   |
| 8. Fuel filler cap                  |   |   |

Electra Glide (FLHT) - Right Side View



- |                                     |                                 |                                    |
|-------------------------------------|---------------------------------|------------------------------------|
| 1. Clutch hand lever                | 10. Carburetor enrichener knob  | 19. Fuel supply valve              |
| 2. Gear shifter                     | 11. Engine oil filter           | 20. Primary chain inspection cover |
| 3. Footrest(s)                      | 12. Primary chain cover         | 21. Clutch inspection cover        |
| 4. Horn                             | 13. Rear axle adjuster          | 22. Primary drain plug             |
| 5. Headlamp                         | 14. Rear sprocket and drive     | 23. Rear suspension air valve      |
| 6. Front turn signal & running lamp | 15. Timing inspection hole plug | 24. Front suspension air valve     |
| 7. Rear turn signal lamp            | 16. Voltage regulator           | 25. Passing lamps                  |
| 8. Jiffy stand                      | 17. Ignition coil               | 26. Fork lock                      |
| 9. Ignition/light switch            | 18. Transmission drain plug     |                                    |

Electra Glide Road King (FLHR) - Left Side View



- |                                     |  |                                 |
|-------------------------------------|--|---------------------------------|
| 1. Front brake hand lever           | 9. Carburetor/air cleaner                      | 16. Battery (under seat)        |
| 2. Rear brake pedal                 | 10. Front brake master cylinder<br>& reservoir | 17. Transmission fill plug      |
| 3. Throttle control grip            | 11. Rear brake master cylinder                 | 18. Ignition module             |
| 4. Footrest(s)                      | 12. Engine oil fill plug & dipstick            | 19. Engine oil tank drain       |
| 5. Front turn signal & running lamp | 13. Electric starter motor                     | 20. Rear brake fluid reservoir  |
| 6. Rear turn signal lamp            | 14. Rear axle adjuster                         | 21. Speedometer                 |
| 7. Tail/stop lamp                   | 15. Shock absorber(s)                          | 22. Acc. connector (under seat) |
| 8. Fuel filler cap                  |  |                                 |

Electra Glide Road King (FLHR) - Right Side View

# NOTES

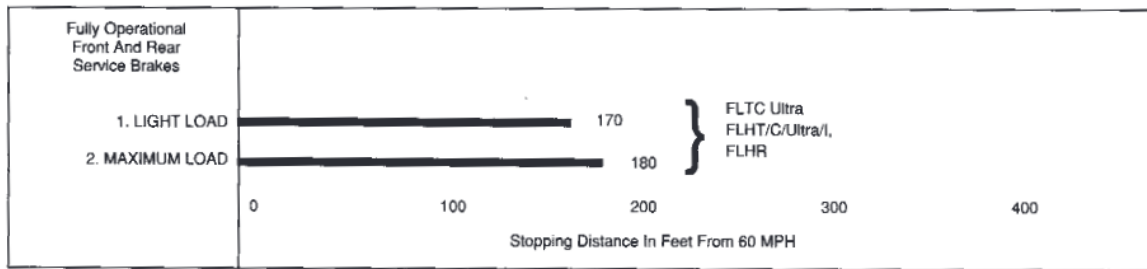
## STOPPING DISTANCE

Description of vehicle: Harley-Davidson 1995 FLTC ULTRA, FLHT/C/ULTRA/I and FLHR models.

Required by Federal Consumer Information Regulations.

Notice: The information presented represents results obtainable by skilled riders under controlled road and vehicle conditions. The information may not be correct under other conditions.

These figures indicate braking performance that can be met or exceeded by the vehicle to which it applies, without locking the wheels, under different conditions of loading.



1. Light Load Vehicle Weight includes 200 lb. rider - no accessories.
2. Maximum Loaded Vehicle Weight includes 300 lb. rider and passenger plus full accessory load.

## DIMENSIONS (IN.)

	FLTC U	FLHT/C/U/I	FLHR
Wheel Base.....	62.94	62.94	62.94
Overall Length.....	94.25	94.25	94.25
Overall Width.....	37.00	39.00	34.45
Road Clearance.....	5.12	5.12	5.12
Overall Height.....	58.75	61.00	55.06
Saddle Height.....	28.50	28.00	28.20

## WEIGHT (LBS.)

	FLTC U	FLHT/C/U/I	FLHR
<b>DRY WEIGHT</b> (as shipped from the factory).....	765	711/741/765	692
GVWR.....	1179	1179	1179
GAWR - Front.....	410	410	410
GAWR - Rear.....	769	769	769

### NOTE

*Gross Vehicle Weight Rating (GVWR) (maximum allowable loaded vehicle weight) and corresponding Gross Axle Weight Ratings (GAWR) are given on a label located on the frame down tube.*

## CAPACITIES (U.S.)

	FLTC U	FLHT/C/U/I	FLHR
<b>Fuel Tank</b> (Gallons) Total.....	5	5	5
Reserve.....	0.9	0.9	0.9
<b>Oil Tank</b> (Quarts) w/filter.....	4	4	4
<b>Transmission</b> (Ounces, approx.).....	20-24	20-24	20-24
<b>Front Fork</b> Each (Ounces, wet).....	7.75	7.75	7.75
<b>Primary Chaincase</b> (Ounces, approx.).....	38-44	38-44	38-44

## IGNITION SYSTEM

### Timing Setting

650-1500 RPM.....	35° BTDC
Battery.....	12 Volt, 20 amp. hr.

### Spark Plugs

Type.....	HD-5R6A
Size.....	14mm
Gap.....	0.038-0.043 in.

## ENGINE

Number of Cylinders .....2  
Type ..... 4-Cycle, 45 Degree V-Type  
Compression Ratio .....8.5 to 1

### SAE Horsepower

Brake Horse power @ RPM	Bore In. (mm)	Stroke In. (mm)	Displacement cu. In. (cc)	Torque lb-ft @ RPM
70@5000	3.498 (88.8)	4.25 (108)	81.6 (1338.6)	80@4000

## TRANSMISSION

Type ..... Constant Mesh, Foot Shift  
Speeds .....5 Forward

## NUMBER OF SPROCKET TEETH

Engine .....25  
Clutch .....36  
Transmission .....32  
Rear Wheel .....70

## OVERALL GEAR RATIOS

First (Low) Gear ..... 10.110  
Second Gear ..... 6.958  
Third Gear ..... 4.953  
Fourth Gear ..... 3.862  
Fifth Gear ..... 3.150

## TIRE DATA



**WARNING**

For your personal safety, tires, rims and air valves must be correctly matched to wheel rims. See your Harley-Davidson dealer. Mismatching tires, tubes, rims and air valves may result in damage to the tire bead during mounting or may allow the tire to slip on the rim, possibly causing tire failure. In addition, using tires other than those specified may adversely affect motorcycle stability. Use only tube tires on all Harley-Davidson laced (wire spoked) wheels and tubeless type tires on all Harley-Davidson cast and disc wheels. Protective rubber rim strips must be used with tube type tires when mounted on laced (wire spoked) wheels. Tire sizes are molded on the tire sidewall. Tube sizes are printed on the tube.



interchangeable. Use the front tire **ONLY** for a front tire. **DO NOT** put a rear tire on the front of a vehicle.

1995 VEHICLES DUNLOP TIRES ONLY		TIRE PRESSURE PSI (COLD)	
		Front	Rear
Solo Rider	FLTC Ultra FLHT/C/Ultra/I FLHR	36	36
Rider & One Passenger	FLTC Ultra FLHT/C/Ultra/I FLHR	36	40

 **WARNING**

**Maximum inflation pressure must not exceed specification on tire sidewall.**

## FUEL

Use a good quality unleaded gasoline. For carbureted motorcycles, use at least 87 pump octane. For sequential port fuel injected vehicles, Harley-Davidson recommends using at least 91 pump octane. Octane rating is usually found on the pump.

 **WARNING**

**Remove fuel filler cap slowly. Fill fuel tank slowly to**

prevent spillage. Do not overfill. Do not fill above the bottom of the filler neck insert. Leave air space to allow for fuel expansion. Expansion can cause an overfilled tank to overflow gasoline through the filler cap onto surrounding areas. After refueling, be sure fuel filler cap is securely tightened.

 **CAUTION**

- **Using gasoline that has an alcohol additive, such as methanol, may cause fuel system rubber components' failure and/or engine damage.**
- **Gasohol spills can stain the paint on your Harley-Davidson.**

Today's service station pumps are increasingly of the higher capacity variety. With the high flow of gasoline into a motorcycle tank, air entrapment and pressurization is a possibility. The pressurized air may force gasoline to escape through whatever opening is available within the filler tube. This may not only soil clothing, but may create a potential fire hazard.

## GASOLINE/ALCOHOL BLENDS

Your motorcycle was designed to obtain the best performance and efficiency using unleaded gasoline. Some fuel suppliers sell gasoline/alcohol blends as a fuel. The type and amount of alcohol added to the fuel is important.

- **DO NOT USE GASOLINES CONTAINING METHANOL.**

Using gasoline/methanol blends will result in starting and driveability deterioration and damage to critical fuel system components.

- Gasolines containing METHYL TERTIARY BUTYL ETHER (MTBE): Gasoline/MTBE blends are a mixture of gasoline and as much as 15% MTBE. Gasoline/ MTBE blends can be used in your motorcycle.
- ETHANOL (Grain alcohol) is a mixture of 10% ethanol and 90% unleaded gasoline. It is identified as "gasohol", "ethanol enhanced", or "contains ethanol". Gasoline/ethanol blends can be used in your motorcycle.

Because of their generally higher volatility, these blends may adversely affect the starting, driveability and fuel efficiency of your motorcycle. If you experience these problems, Harley-Davidson recommends you operate your motorcycle on straight, unleaded gasoline.

## CATALYTIC CONVERTERS

California model 1340cc motorcycles are equipped with catalytic converters.

### WARNING

**Do not operate a catalytic converter-equipped vehicle with engine misfire or a non-firing cylinder. If you operate the vehicle under these conditions, the exhaust will become abnormally hot, which can cause personal injury.**

### CAUTION

- **Do not operate catalytic converter-equipped vehicle with engine misfire or a non-firing cylinder. If you operate the vehicle under these conditions, the exhaust will become abnormally hot, which can cause vehicle damage, including emission control loss.**
- **You must use ONLY unleaded fuel in California model catalytic converter-equipped motorcycles. Using leaded fuel will damage the emissions control system.**

## BULB CHART - FLTC ULTRA, FLHT/C/ULTRA/I, FLHR

LAMP DESCRIPTION ALL LAMPS 12 V	NUMBER OF BULBS (REQUIRED)	CURRENT DRAW (AMPERAGE)	HARLEY-DAVIDSON PART NUMBER
Headlamp FLTC ULTRA FLHT/C/ULTRA/I, FLHR	2 1	4.7/4.3x2 4.7/4.3	67692-92 67697-81
Tail and Stop Lamp Tail Lamp Stop Lamp	1 (Ultra - 3)	0.59 2.10	68168-89
Passing Lamp	2	2.34	68674-69
Turn Signal Lamp Front/Running Rear	2 2	2.10/0.59 2.10	68168-89 68572-64B
Tour-Pak Side Lamps - FLTC ULTRA, FLHTC/ULTRA/I	4	0.10	53439-79
Fender Tip Lamps	2	0.10	53439-79
Instrument Panel Lamps - FLTC ULTRA, FLHTC/ULTRA/I	9	0.04	71099-74
Instrument Panel Lamps - FLHR High Beam Indicator Oil Pressure Indicator Neutral Indicator Turn Signal Indicator Speedometer Odometer Fuel Gauge	1 1 1 1 1 1 1	0.15 0.15 0.15 0.15 0.27 0.19 0.12	68024-94 68024-94 68024-94 68024-94 52440-94 52439-94 67136-85
Gauges - FLTC ULTRA, FLHT/C/ULTRA/I	2	0.27	75045-84

The Custom section contains the vehicle specifications for the following Harley-Davidson models:

FLSTC.....	Heritage Softail Classic
FXSTC .....	Softail Custom
FXSTS.....	Softail Springer
FXSTSB .....	Softail Bad Boy
FLSTF .....	Fat Boy
FLSTN.....	Heritage Special
FXDWG.....	Dyna Wide Glide
FXDL.....	Dyna Low Rider
FXDS-CON .....	Dyna Convertible
FXD.....	Dyna Super Glide

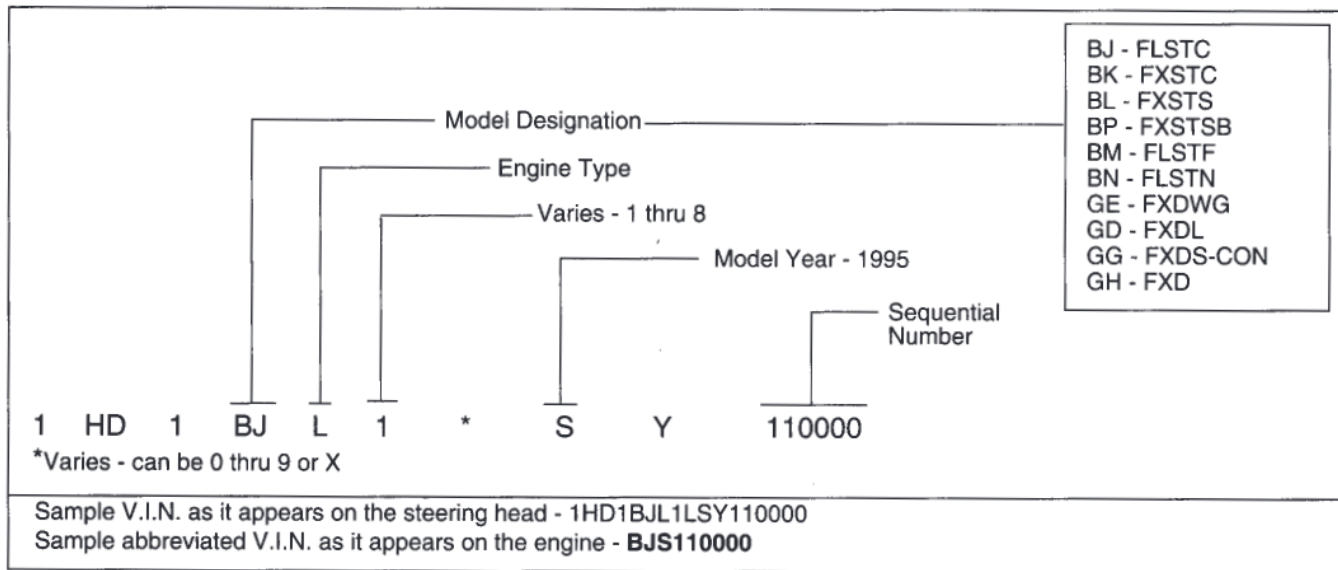
# NOTES

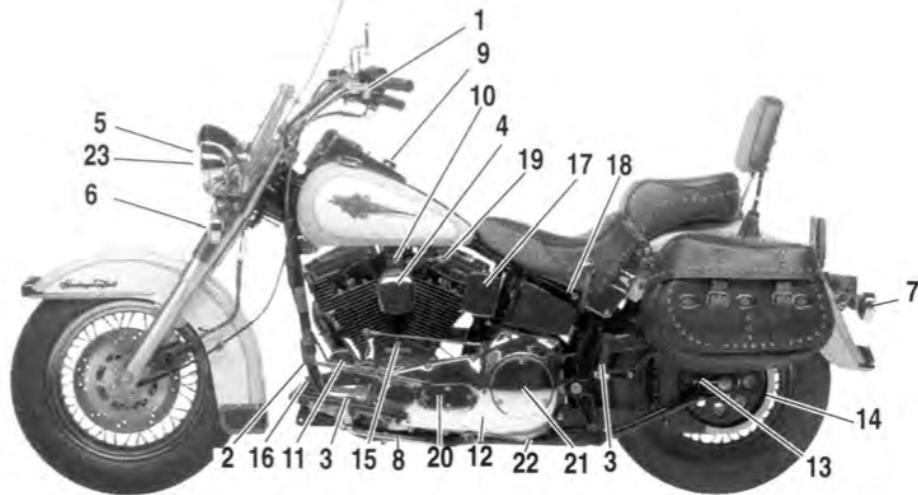
## VEHICLE IDENTIFICATION NUMBER (V.I.N.)

The full 17 digit serial, or Vehicle Identification Number (V.I.N.) is stamped on the steering head and on a label located on the right front frame downtube. An abbreviated V.I.N. is stamped on the left side crankcase above the timing hole.

### NOTE

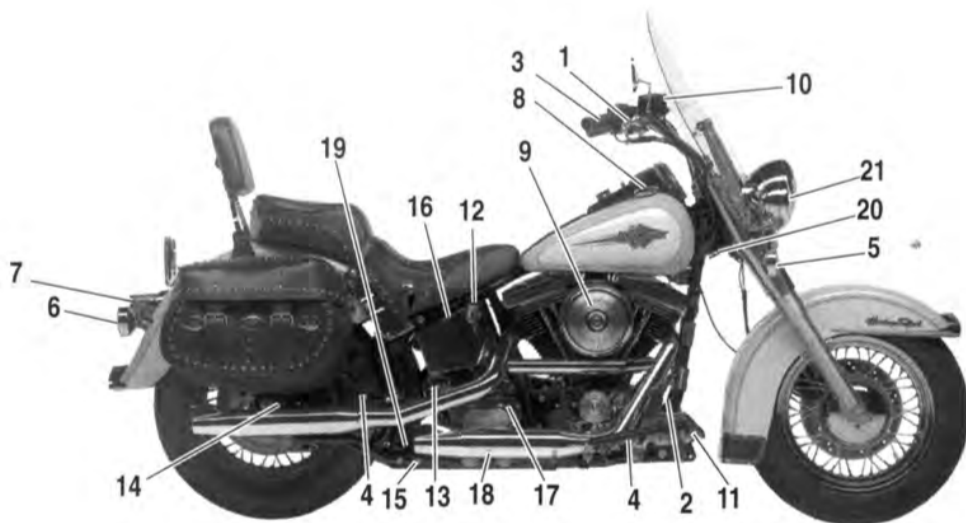
*Always give the full 17 digit Vehicle Identification Number when ordering parts or making any inquiry about your motorcycle.*





- |                                     |                                 |                                    |
|-------------------------------------|---------------------------------|------------------------------------|
| 1. Clutch hand lever                | 9. Ignition/light key switch    | 17. Ignition coil                  |
| 2. Gear shifter                     | 10. Carburetor enricher knob    | 18. Ignition module (under seat)   |
| 3. Footrest(s)                      | 11. Engine oil filter           | 19. Fuel supply valve              |
| 4. Horn                             | 12. Primary chain cover         | 20. Primary chain inspection cover |
| 5. Headlamp                         | 13. Rear axle adjuster          | 21. Clutch inspection cover        |
| 6. Front turn signal & running lamp | 14. Rear sprocket and drive     | 22. Primary drain plug             |
| 7. Rear turn signal lamp            | 15. Timing inspection hole plug | 23. Passing lamp                   |
| 8. Jiffy stand                      | 16. Voltage regulator           |                                    |

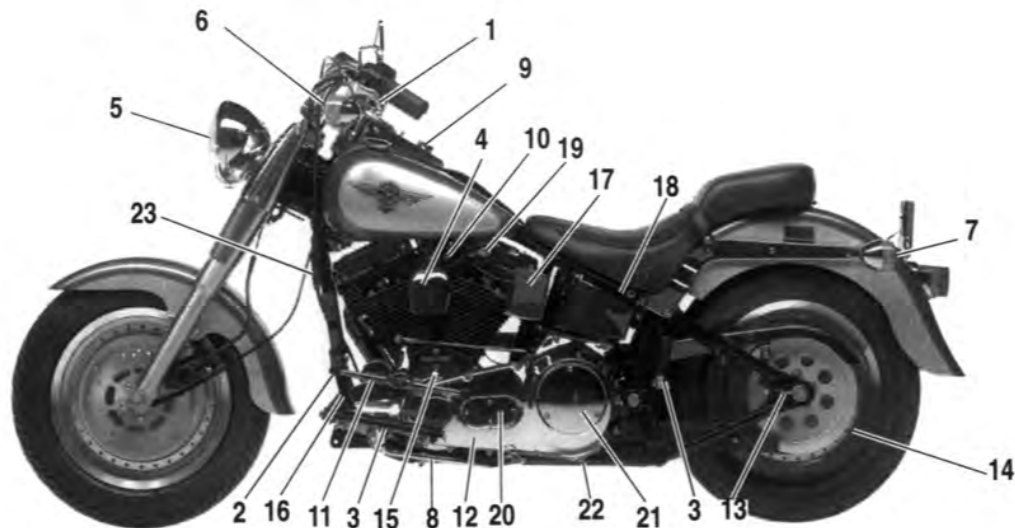
Heritage Softail Classic (FLSTC) - Left Side View



- |                                     |   |                             |
|-------------------------------------|---|-----------------------------|
| 1. Front brake hand lever           | 9. Carburetor/air cleaner                   | 15. Shock absorber(s)       |
| 2. Rear brake pedal                 | 10. Front brake master cylinder & reservoir | 16. Battery (under seat)    |
| 3. Throttle control grip            | 11. Rear brake master cylinder & reservoir  | 17. Transmission fill plug  |
| 4. Footrest(s)                      | 12. Engine oil fill plug & dipstick         | 18. Transmission drain plug |
| 5. Front turn signal & running lamp | 13. Electric starter motor                  | 19. Engine oil tank drain   |
| 6. Rear turn signal lamp            | 14. Rear axle adjuster                      | 20. Fork lock brackets      |
| 7. Tail/stop lamp                   |   | 21. Passing lamp            |
| 8. Fuel filler cap                  |   | 22. Speedometer             |

Heritage Softail Classic (FLSTC) - Right Side View



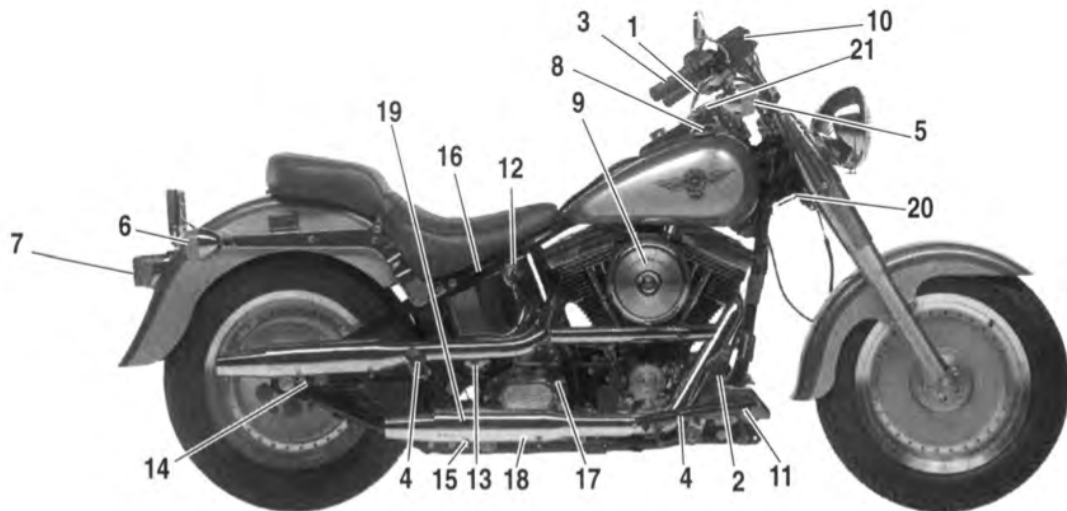


- 1. Clutch hand lever
- 2. Gear shifter
- 3. Footrest(s)
- 4. Horn
- 5. Headlamp
- 6. Front turn signal & running lamp
- 7. Rear turn signal lamp
- 8. Jiffy stand

- 9. Ignition/light key switch
- 10. Carburetor enricher knob
- 11. Engine oil filter
- 12. Primary chain cover
- 13. Rear axle adjuster
- 14. Rear sprocket and drive
- 15. Timing inspection hole plug
- 16. Voltage regulator

- 17. Ignition coil
- 18. Ignition module (under seat)
- 19. Fuel supply valve
- 20. Primary chain inspection cover
- 21. Clutch inspection cover
- 22. Primary drain plug
- 23. Clutch cable adjuster

Fat Boy (FLSTF) - Left Side View

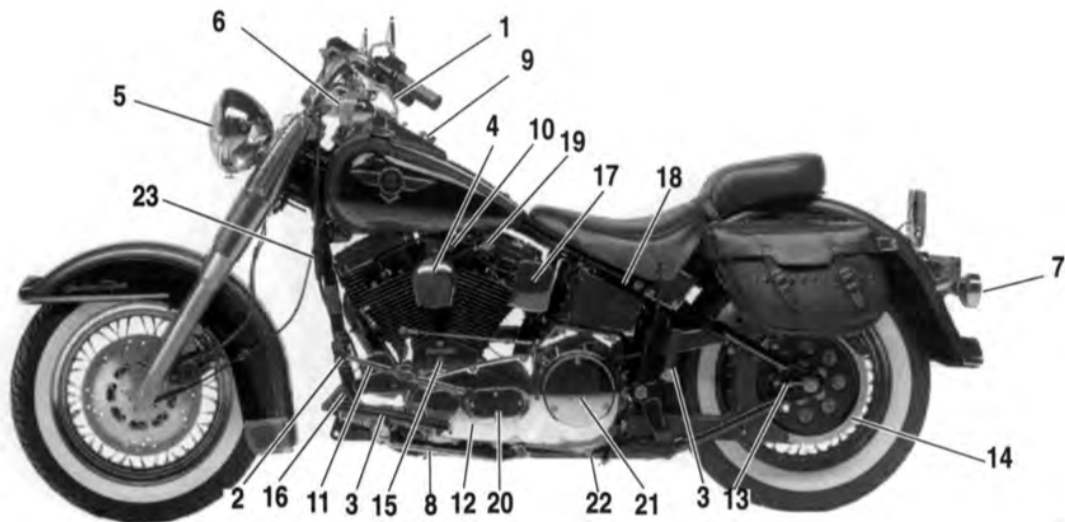


1. Front brake hand lever
2. Rear brake pedal
3. Throttle control grip
4. Footrest(s)
5. Front turn signal & running lamp
6. Rear turn signal lamp
7. Tail/stop lamp
8. Fuel filler cap

9. Carburetor/air cleaner
10. Front brake master cylinder & reservoir
11. Rear brake master cylinder & reservoir
12. Engine oil fill plug & dipstick
13. Electric starter motor
14. Rear axle adjuster

15. Shock absorber(s)
16. Battery (under seat)
17. Transmission fill plug
18. Transmission oil tank drain
19. Engine oil tank drain
20. Fork lock brackets
21. Speedometer

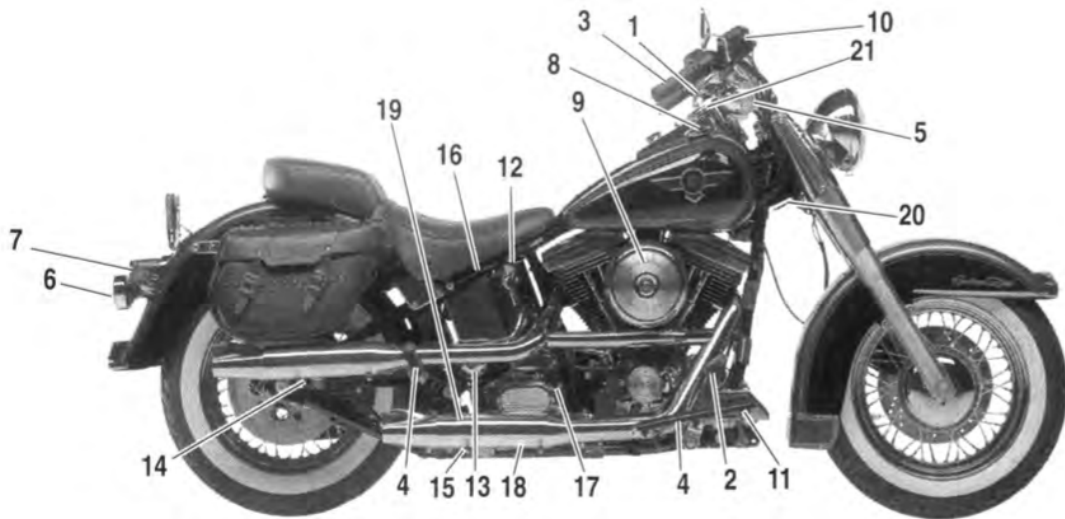
Fat Boy (FLSTF) - Right Side View



- |                                     |                                 |                                    |
|-------------------------------------|---------------------------------|------------------------------------|
| 1. Clutch hand lever                | 9. Ignition/light key switch    | 17. Ignition coil                  |
| 2. Gear shifter                     | 10. Carburetor enricher knob    | 18. Ignition module (under seat)   |
| 3. Footrest(s)                      | 11. Engine oil filter           | 19. Fuel supply valve              |
| 4. Horn                             | 12. Primary chain cover         | 20. Primary chain inspection cover |
| 5. Headlamp                         | 13. Rear axle adjuster          | 21. Clutch inspection cover        |
| 6. Front turn signal & running lamp | 14. Rear sprocket and drive     | 22. Primary drain plug             |
| 7. Rear turn signal lamp            | 15. Timing inspection hole plug | 23. Clutch cable adjuster          |
| 8. Jiffy stand                      | 16. Voltage regulator           |                                    |

Softail Special (FLSTN) - Left Side View (Typical)

Pix #'s

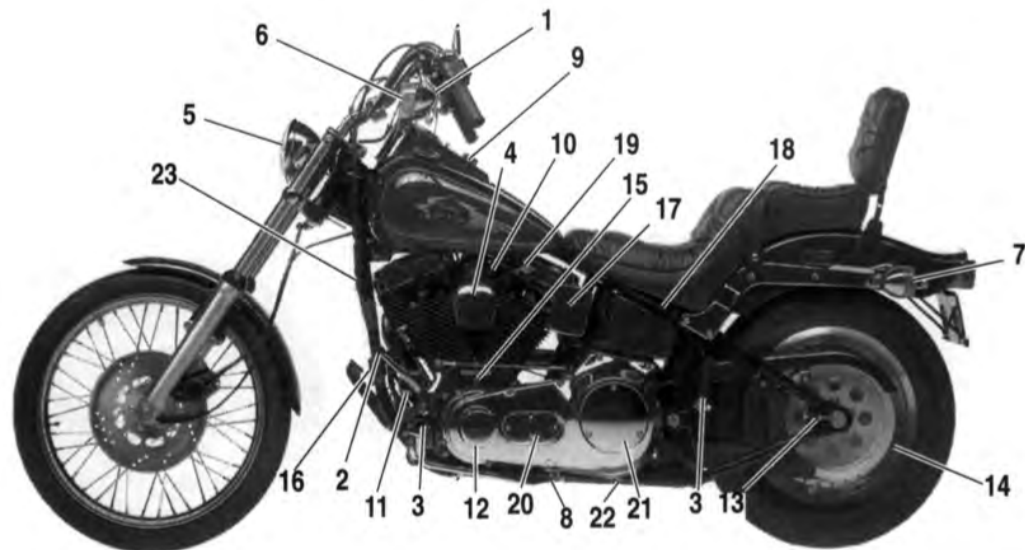


1. Front brake hand lever
2. Rear brake pedal
3. Throttle control grip
4. Footrest(s)
5. Front turn signal & running lamp
6. Rear turn signal lamp
7. Tail/stop lamp
8. Fuel filler cap

9. Carburetor/air cleaner
10. Front brake master cylinder & reservoir
11. Rear brake master cylinder & reservoir
12. Engine oil fill plug & dipstick
13. Electric starter motor
14. Rear axle adjuster

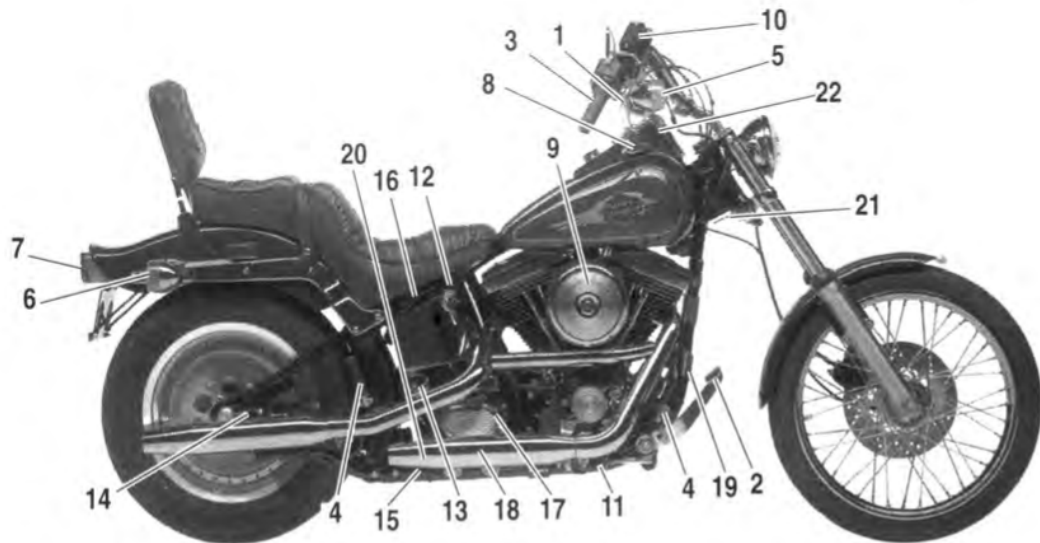
15. Shock absorber(s)
16. Battery (under seat)
17. Transmission fill plug
18. Transmission drain plug
19. Engine oil tank drain
20. Fork lock brackets
21. Speedometer

Softail Special (FLSTN) - Right Side View (Typical)



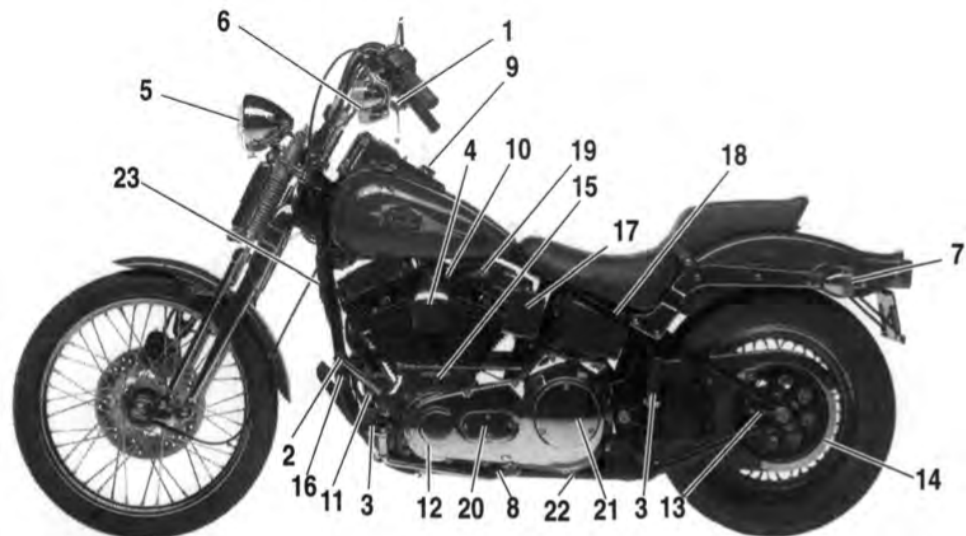
- |                                     |                                 |                                    |
|-------------------------------------|---------------------------------|------------------------------------|
| 1. Clutch hand lever                | 8. Jiffy stand                  | 16. Voltage regulator              |
| 2. Gear shifter                     | 9. Ignition/light key switch    | 17. Ignition coil                  |
| 3. Footrest(s)                      | 10. Carburetor enricher knob    | 18. Ignition module (under seat)   |
| 4. Horn                             | 11. Engine oil filter           | 19. Fuel supply valve              |
| 5. Headlamp                         | 12. Primary chain cover         | 20. Primary chain inspection cover |
| 6. Front turn signal & running lamp | 13. Rear axle adjuster          | 21. Clutch inspection cover        |
| 7. Rear turn signal lamp            | 14. Rear sprocket and drive     | 22. Primary drain plug             |
|                                     | 15. Timing inspection hole plug | 23. Clutch cable adjuster          |

Softail Custom (FXSTC) - Left Side View



- |                                     |   |                                |
|-------------------------------------|---|--------------------------------|
| 1. Front brake hand lever           | 9. Carburetor/air cleaner                   | 16. Battery (under seat)       |
| 2. Rear brake pedal                 | 10. Front brake master cylinder & reservoir | 17. Transmission fill plug     |
| 3. Throttle control grip            | 11. Rear brake master cylinder              | 18. Transmission drain plug    |
| 4. Footrest(s)                      | 12. Engine oil fill plug & dipstick         | 19. Rear brake fluid reservoir |
| 5. Front turn signal & running lamp | 13. Electric starter motor                  | 20. Engine oil tank drain      |
| 6. Rear turn signal lamp            | 14. Rear axle adjuster                      | 21. Fork lock brackets         |
| 7. Tail/stop lamp                   | 15. Shock absorber(s)                       | 22. Speedometer                |
| 8. Fuel filler cap                  |   |                                |

Softail Custom (FXSTC) - Right Side View



1. Clutch hand lever

2. Gear shifter

3. Footrest(s)

4. Horn

5. Headlamp

6. Front turn signal & running lamp

7. Rear turn signal lamp

8. Jiffy stand

9. Ignition/light key switch

10. Carburetor enrichener knob

11. Engine oil filter

12. Primary chain cover

13. Rear axle adjuster

14. Rear sprocket and drive

15. Timing inspection hole plug

16. Voltage regulator

17. Ignition coil

18. Ignition module (under seat)

19. Fuel supply valve

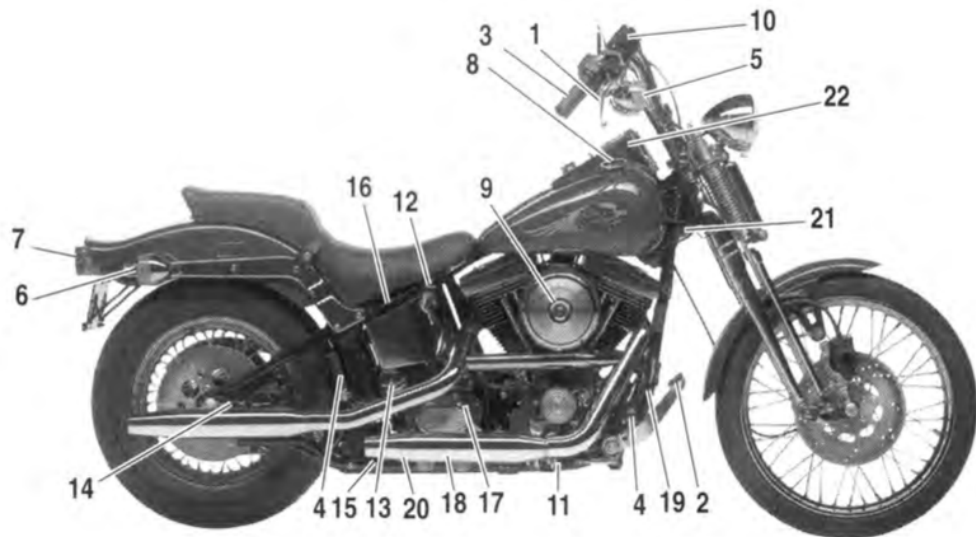
20. Primary chain inspection cover

21. Clutch inspection cover

22. Primary drain plug

23. Clutch cable adjuster

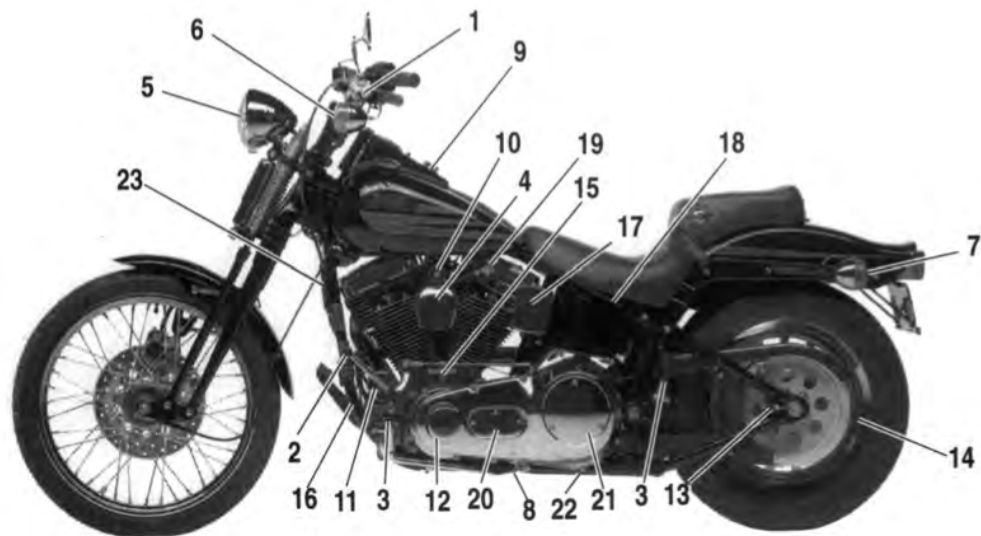
Springer Softail (FXSTS) - Left Side View



- |                                     |   |                                |
|-------------------------------------|---|--------------------------------|
| 1. Front brake hand lever           | 9. Carburetor/air cleaner                   | 16. Battery (under seat)       |
| 2. Rear brake pedal                 | 10. Front brake master cylinder & reservoir | 17. Transmission fill plug     |
| 3. Throttle control grip            | 11. Rear brake master cylinder              | 18. Transmission drain plug    |
| 4. Footrest(s)                      | 12. Engine oil fill plug & dipstick         | 19. Rear brake fluid reservoir |
| 5. Front turn signal & running lamp | 13. Electric starter motor                  | 20. Engine oil tank drain      |
| 6. Rear turn signal lamp            | 14. Rear axle adjuster                      | 21. Fork lock brackets         |
| 7. Tail/stop lamp                   | 15. Shock absorber(s)                       | 22. Speedometer                |
| 8. Fuel filler cap                  |   |                                |

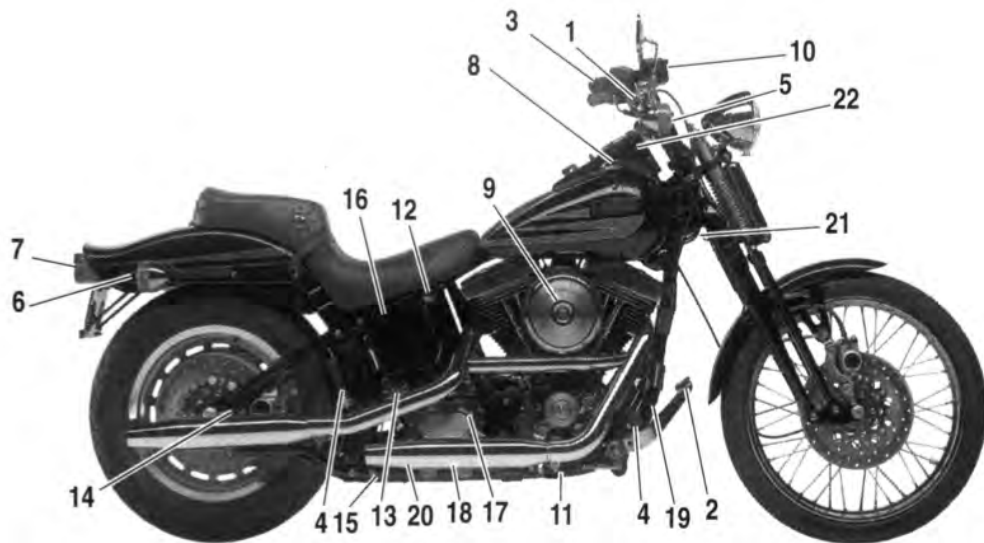
Springer Softail (FXSTS) - Right Side View





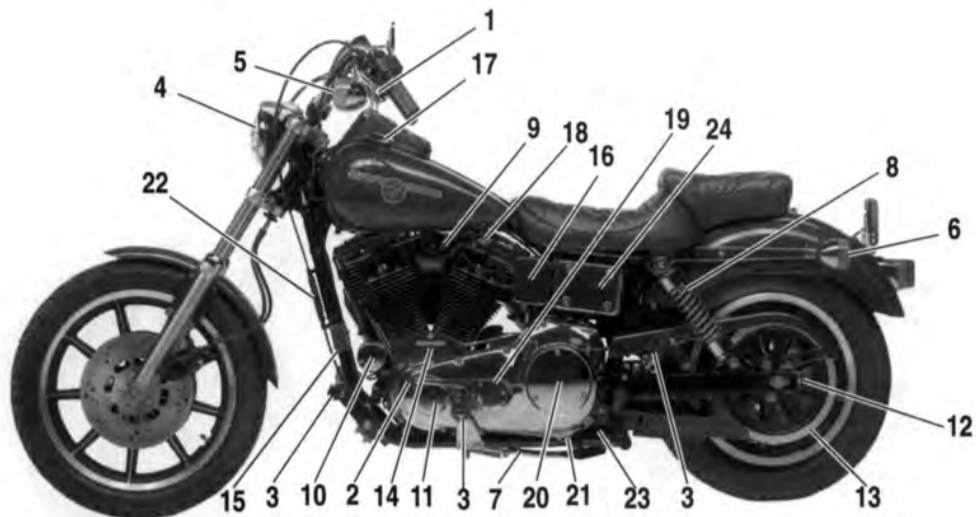
- |                                     |                                 |                                    |
|-------------------------------------|---------------------------------|------------------------------------|
| 1. Clutch hand lever                | 9. Ignition/light key switch    | 17. Ignition coil                  |
| 2. Gear shifter                     | 10. Carburetor enrichener knob  | 18. Ignition module (under seat)   |
| 3. Footrest(s)                      | 11. Engine oil filter           | 19. Fuel supply valve              |
| 4. Horn                             | 12. Primary chain cover         | 20. Primary chain inspection cover |
| 5. Headlamp                         | 13. Rear axle adjuster          | 21. Clutch inspection cover        |
| 6. Front turn signal & running lamp | 14. Rear sprocket and drive     | 22. Primary drain plug             |
| 7. Rear turn signal lamp            | 15. Timing inspection hole plug | 23. Clutch cable adjuster          |
| 8. Jiffy stand                      | 16. Voltage regulator           |                                    |

Bad Boy Softail (FXSTSB) - Left Side View



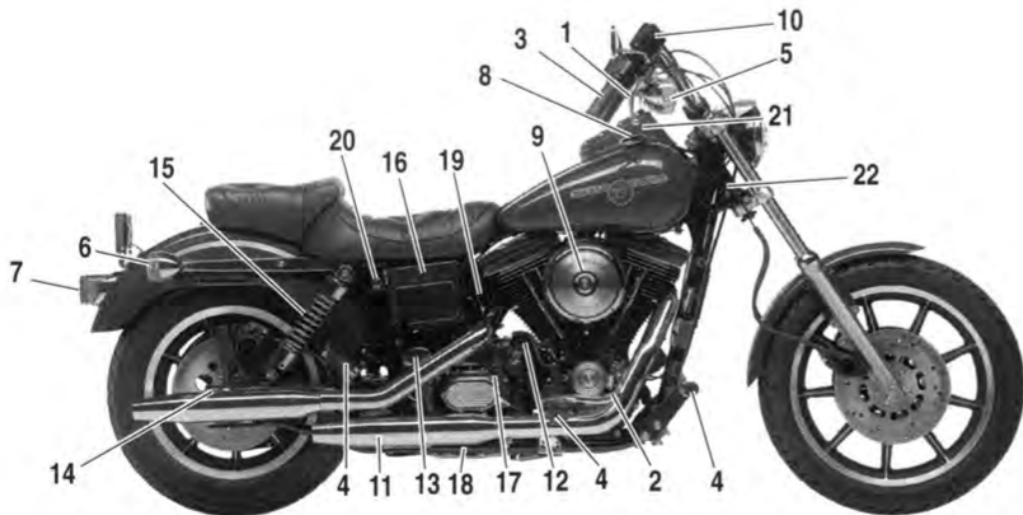
- |                                     |   |                                |
|-------------------------------------|---|--------------------------------|
| 1. Front brake hand lever           | 9. Carburetor/air cleaner                   | 16. Battery (under seat)       |
| 2. Rear brake pedal                 | 10. Front brake master cylinder & reservoir | 17. Transmission fill plug     |
| 3. Throttle control grip            | 11. Rear brake master cylinder              | 18. Transmission drain plug    |
| 4. Footrest(s)                      | 12. Engine oil fill plug & dipstick         | 19. Rear brake fluid reservoir |
| 5. Front turn signal & running lamp | 13. Electric starter motor                  | 20. Engine oil tank drain      |
| 6. Rear turn signal lamp            | 14. Rear axle adjuster                      | 21. Fork lock brackets         |
| 7. Tail/stop lamp                   | 15. Shock absorber(s)                       | 22. Speedometer                |
| 8. Fuel filler cap                  |   |                                |

Bad Boy Softail (FXSTSB) - Right Side View



- |                                     |                                 |   |
|-------------------------------------|---------------------------------|---|
| 1. Clutch hand lever                | 10. Engine oil filter           | 19. Primary chain inspection cover  |
| 2. Gear shifter                     | 11. Primary chain cover         | 20. Clutch inspection cover   |
| 3. Footrest(s)                      | 12. Rear axle adjuster          | 21. Primary drain plug  |
| 4. Headlamp                         | 13. Rear sprocket and drive     | 22. Clutch cable adjuster   |
| 5. Front turn signal & running lamp | 14. Timing inspection hole plug | 23. Engine oil tank drain (under transmission)  |
| 6. Rear turn signal lamp            | 15. Voltage regulator           | 24. Electrical enclosure (contains ignition module, circuit breakers and starter relay) |
| 7. Jiffy stand                      | 16. Ignition coil               |   |
| 8. Shock absorber                   | 17. Fuel gauge                  |   |
| 9. Carburetor enricher knob         | 18. Fuel supply valve           |   |

Dyna Low Rider (FXDL) - Left Side View

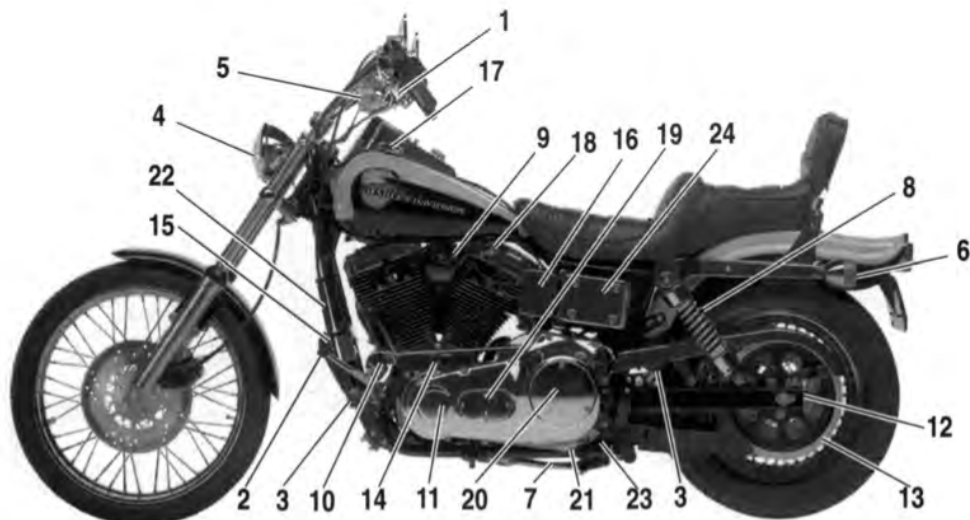


1. Front brake hand lever
2. Rear brake pedal
3. Throttle control grip
4. Footrest(s)
5. Front turn signal & running lamp
6. Rear turn signal lamp
7. Tail/stop lamp
8. Fuel filler cap

9. Carburetor/air cleaner
10. Front brake master cylinder & reservoir
11. Rear brake master cylinder & reservoir
12. Engine oil fill plug & dipstick
13. Electric starter motor
14. Rear axle adjuster

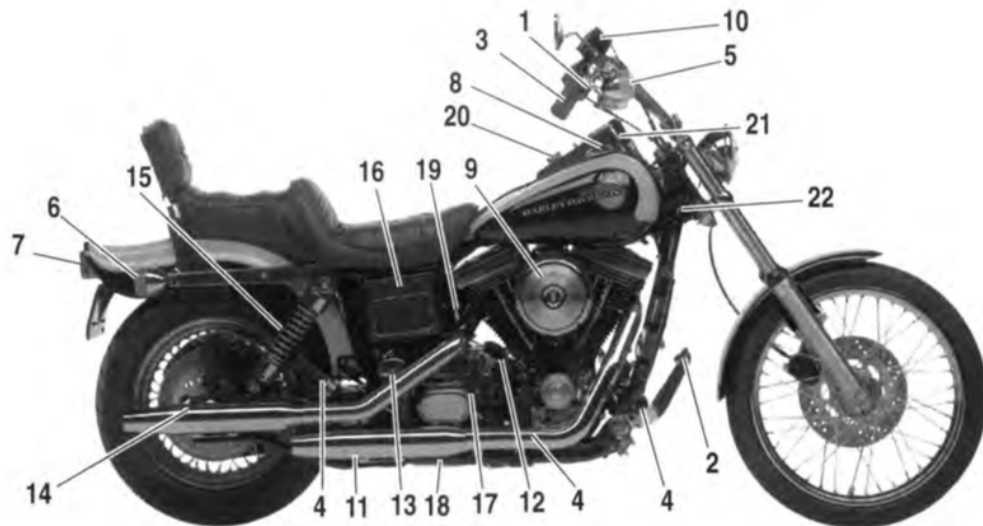
15. Shock absorber
16. Battery
17. Transmission fill plug
18. Transmission drain plug (under transmission)
19. Horn
20. Ignition/light key switch
21. Speedometer/tachometer
22. Fork lock

Dyna Low Rider (FXDL) - Right Side View



- |                                     |                                 |   |
|-------------------------------------|---------------------------------|---|
| 1. Clutch hand lever                | 10. Engine oil filter           | 19. Primary chain inspection cover  |
| 2. Gear shifter                     | 11. Primary chain cover         | 20. Clutch inspection cover   |
| 3. Footrest(s)                      | 12. Rear axle adjuster          | 21. Primary drain plug  |
| 4. Headlamp                         | 13. Rear sprocket and drive     | 22. Clutch cable adjuster   |
| 5. Front turn signal & running lamp | 14. Timing inspection hole plug | 23. Engine oil tank drain (under transmission)  |
| 6. Rear turn signal lamp            | 15. Voltage regulator           | 24. Electrical enclosure (contains ignition module, circuit breakers and starter relay) |
| 7. Jiffy stand                      | 16. Ignition coil               |   |
| 8. Shock absorber                   | 17. Fuel gauge                  |   |
| 9. Carburetor enrichener knob       | 18. Fuel supply valve           |   |

Dyna Wide Glide (FXDWG) - Left Side View

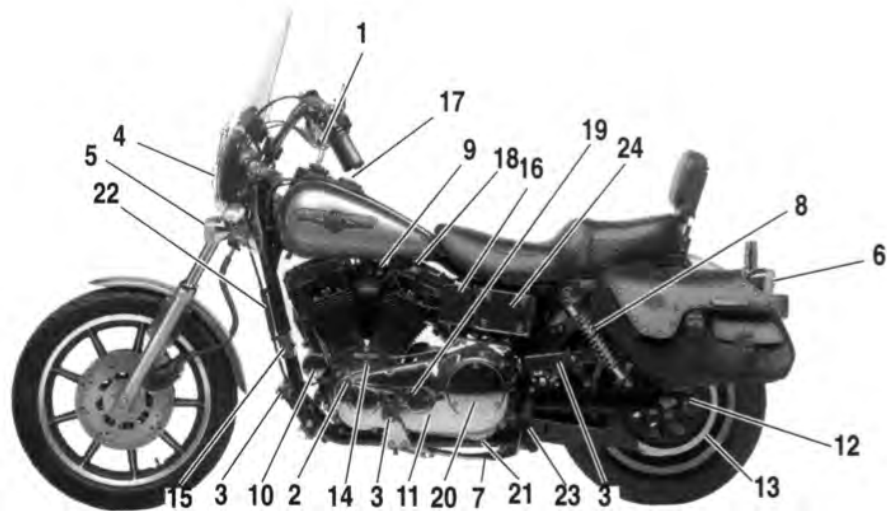


1. Front brake hand lever
2. Rear brake pedal
3. Throttle control grip
4. Footrest(s)
5. Front turn signal & running lamp
6. Rear turn signal lamp
7. Tail/stop lamp
8. Fuel filler cap

9. Carburetor/air cleaner
10. Front brake master cylinder & reservoir
11. Rear brake master cylinder & reservoir
12. Engine oil fill plug & dipstick
13. Electric starter motor
14. Rear axle adjuster

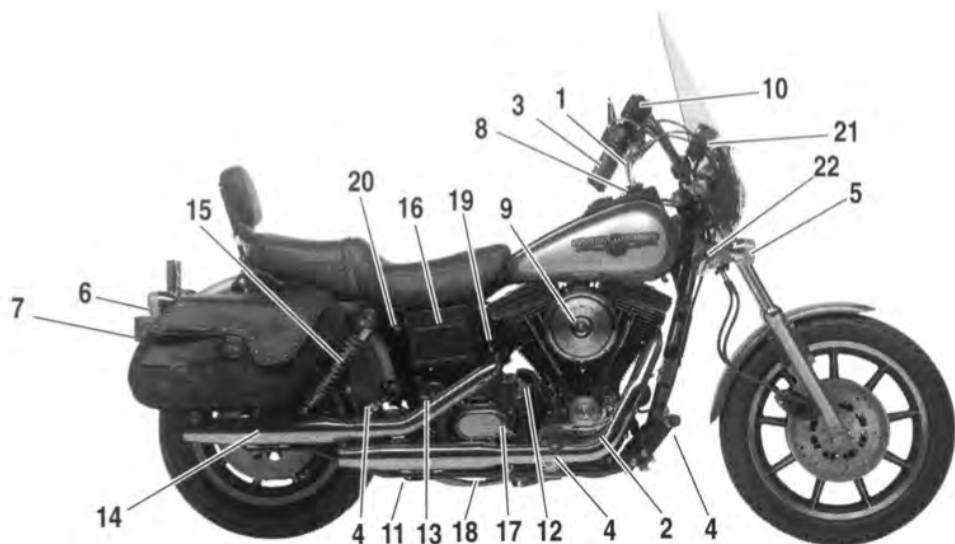
15. Shock absorber
16. Battery
17. Transmission fill plug
18. Transmission drain plug (under transmission)
19. Horn
20. Ignition/light key switch
21. Speedometer
22. Fork lock

Dyna Wide Glide (FXDWG) - Right Side View



- |                                     |                                 |   |
|-------------------------------------|---------------------------------|---|
| 1. Clutch hand lever                | 10. Engine oil filter           | 19. Primary chain inspection cover  |
| 2. Gear shifter                     | 11. Primary chain cover         | 20. Clutch inspection cover   |
| 3. Footrest(s)                      | 12. Rear axle adjuster          | 21. Primary drain plug  |
| 4. Headlamp                         | 13. Rear sprocket and drive     | 22. Clutch cable adjuster   |
| 5. Front turn signal & running lamp | 14. Timing inspection hole plug | 23. Engine oil tank drain (under transmission)  |
| 6. Rear turn signal lamp            | 15. Voltage regulator           | 24. Electrical enclosure (contains ignition module, circuit breakers and starter relay) |
| 7. Jiffy stand                      | 16. Ignition coil               |   |
| 8. Shock absorber                   | 17. Fuel gauge                  |   |
| 9. Carburetor enricher knob         | 18. Fuel supply valve           |   |

Dyna Glide Convertible (FXDS-CON) - Left Side View



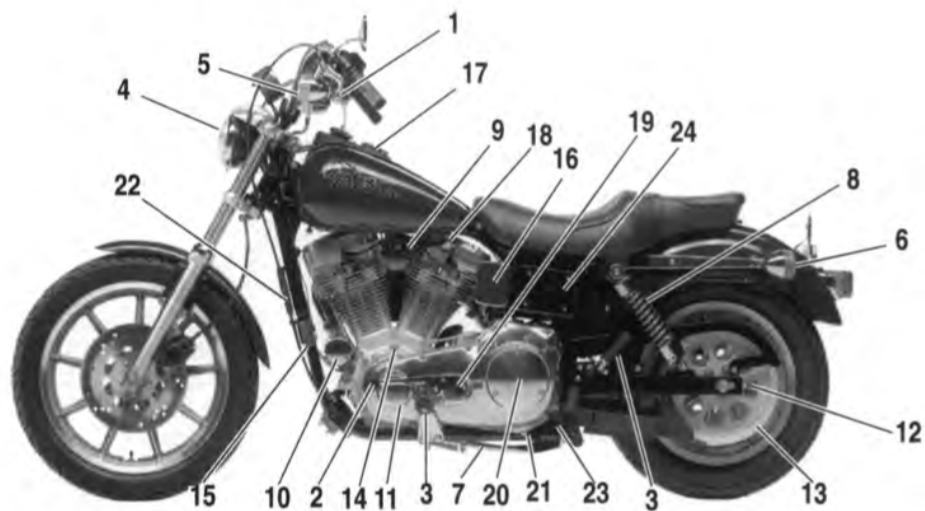
1. Front brake hand lever
2. Rear brake pedal
3. Throttle control grip
4. Footrest(s)
5. Front turn signal & running lamp
6. Rear turn signal lamp
7. Tail/stop lamp
8. Fuel filler cap
9. Carburetor/air cleaner

10. Front brake master cylinder & reservoir
11. Rear brake master cylinder & reservoir
12. Engine oil fill plug & dipstick
13. Electric starter motor
14. Rear axle adjuster
15. Shock absorber

16. Battery
17. Transmission fill plug
18. Transmission drain plug (under transmission)
19. Horn
20. Ignition/light key switch
21. Speedometer/tachometer
22. Fork lock

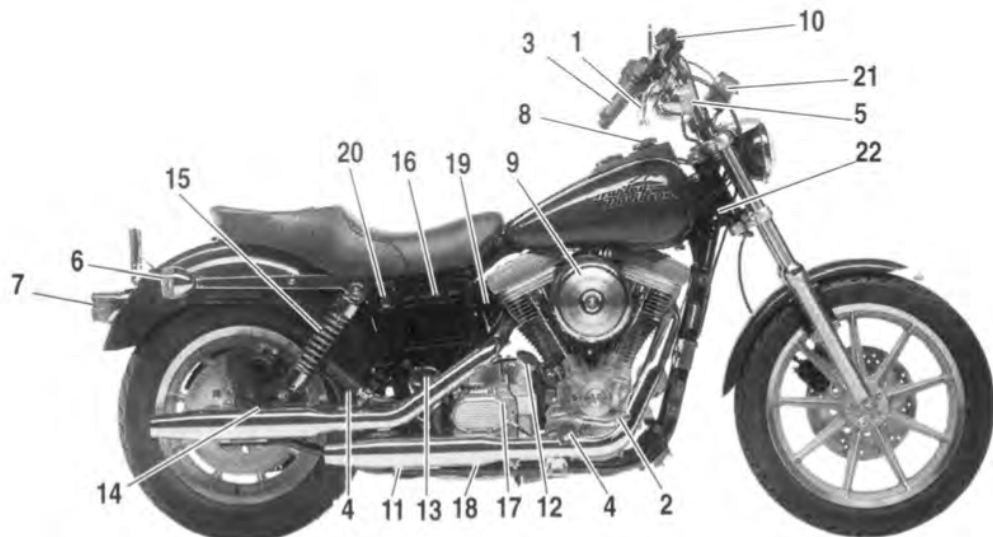
Dyna Glide Convertible (FXDS-CON) - Right Side View





- |                                     |                                 |   |
|-------------------------------------|---------------------------------|---|
| 1. Clutch hand lever                | 10. Engine oil filter           | 19. Primary chain inspection cover  |
| 2. Gear shifter                     | 11. Primary chain cover         | 20. Clutch inspection cover   |
| 3. Footrest(s)                      | 12. Rear axle adjuster          | 21. Primary drain plug  |
| 4. Headlamp                         | 13. Rear sprocket and drive     | 22. Clutch cable adjuster   |
| 5. Front turn signal & running lamp | 14. Timing inspection hole plug | 23. Engine oil tank drain (under transmission)  |
| 6. Rear turn signal lamp            | 15. Voltage regulator           | 24. Electrical enclosure (contains ignition module, circuit breakers and starter relay) |
| 7. Jiffy stand                      | 16. Ignition coil               |   |
| 8. Shock absorber                   | 17. Fuel gauge                  |   |
| 9. Carburetor enrichener knob       | 18. Fuel supply valve           |   |

Dyna Super Glide (FXD) - Left Side View



1. Front brake hand lever
2. Rear brake pedal
3. Throttle control grip
4. Footrest(s)
5. Front turn signal & running lamp
6. Rear turn signal lamp
7. Tail/stop lamp
8. Fuel filler cap

9. Carburetor/air cleaner
10. Front brake master cylinder & reservoir
11. Rear brake master cylinder & reservoir
12. Engine oil fill plug & dipstick
13. Electric starter motor
14. Rear axle adjuster

15. Shock absorber
16. Battery
17. Transmission fill plug
18. Transmission drain plug (under transmission)
19. Horn
20. Ignition/light key switch
21. Speedometer/tachometer
22. Fork lock

Dyna Super Glide (FXD) - Right Side View

# NOTES

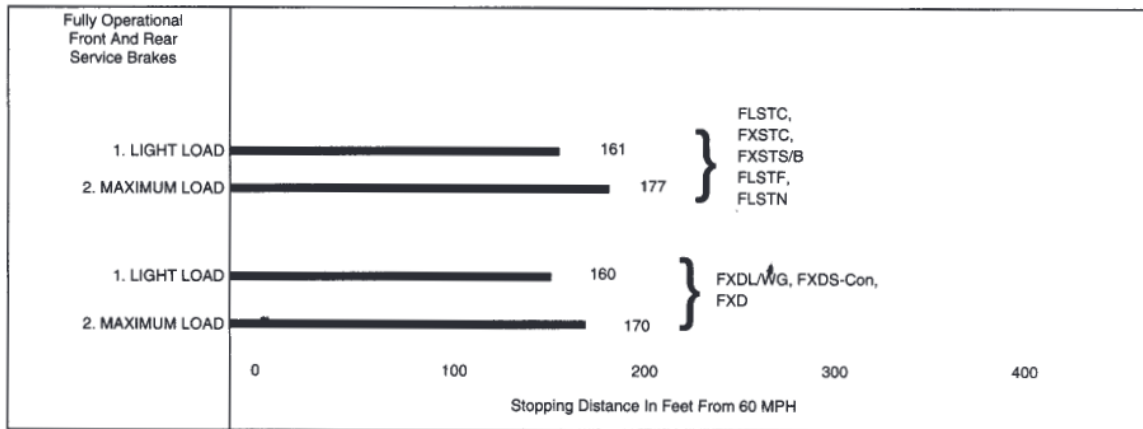
## STOPPING DISTANCE

Description of vehicle: Harley-Davidson 1995 FLSTC/F/N, FXSTC, FXSTS/B and FXD/L/WG/CON models.

Notice: The information presented represents results obtainable by skilled riders under controlled road and vehicle conditions. The information may not be correct under other conditions.

These figures indicate braking performance that can be met or exceeded by the vehicle to which it applies, without locking the wheels, under different conditions of loading.

Required by Federal Consumer Information Regulations.



1. Light Load Vehicle Weight..... Includes 200 lb. rider - no accessories.
2. Maximum Loaded Vehicle Weight..... Includes 300 lb. rider and passenger plus full accessory load.

## DIMENSIONS (IN.)

	Wheel Base	Overall Length	Overall Width	Road Clr'nc	Overall Height	Saddle Height
FLSTC	63.90	94.02	38.00	5.47	59.40	26.50
FXSTC	66.50	94.92	29.00	5.94	47.00	26.70
FXSTS/B	64.41	92.52	29.00	5.59	47.00	26.12
FLSTF/N	63.89	93.85	38.00	5.47	48.00	26.50
FXDWG	66.10	94.50	28.50	5.62	47.50	27.80
FXDS- CON	63.88	92.88	28.95	6.98	59.25	28.75
FXDL	65.50	94.00	28.50	5.62	47.50	27.00
FXD	63.20	91.30	28.50	5.62	47.50	27.00

## WEIGHT (LBS)

	Dry Weight	GVWR	GAWR Front	GAWR Rear
FLSTC	710	1085	390	694
FXSTC	618	1085	390	694
FXSTS/B	625	1085	390	694
FLSTF	650	1085	390	694
FLSTN	710	1085	390	694
FXD/L/WG	598	1085	390	694
FXDS-CON	621	1085	390	694

### NOTE

Gross Vehicle Weight Rating (GVWR) (maximum allowable

loaded vehicle weight) and corresponding Gross Axle Weight Ratings (GAWR) are given on a label located on the frame down tube.

## CAPACITIES

	FLSTC/F FLSTN	FXSTC FXSTSB	FXSTS FXSTSB	FXD/L/ WG	FXDS -CON
<b>Fuel Tank</b> (Gallons)					
Total .....	4.2	5.2*	4.2	4.9/5.2	4.9
Reserve.....	0.4	0.6	0.4	1.1	1.1
<b>Oil Tank</b> (Quarts)					
w/Filter.....	3.0	3.0	3.0	3.0	3.0
<b>Transmission</b> (Ounces, approx.).....	24	24	24	24	24
<b>Front Fork</b> Each (Ounces, wet) .....	11.5	*	None	9.2	9.2
<b>Primary Chaincase</b> (Ounces, approx.).....	30-36	30-36	30-36	30-36	30-36
	*FXSTC - 10.2;	FLSTN - 11.5			

## IGNITION SYSTEM

### Timing Setting

650-1500 RPM ..... 35° BTDC

Battery ..... 12 Volt, 19 amp. hr.

### Spark Plugs

Type ..... HD-5R6A

Size ..... 14mm

Gap ..... 0.038-0.043 in.

## ENGINE

Number of Cylinders ..... 2

Type ..... 4-Cycle, 45 Degree V-Type

Compression Ratio ..... 8.5 to 1

### SAE Horsepower

Brake Horse power @ RPM	Bore in. (mm)	Stroke in. (mm)	Displacement cu. in. (cc)	Torque lb-ft @ RPM
67 @ 5000	3.498 (88.8)	4.25 (108)	81.6 (1338.6)	78 @ 4000

## TRANSMISSION

Type ..... Constant Mesh, Foot Shift

Speeds ..... 5 Forward

## NUMBER OF SPROCKET TEETH

Engine ..... 25

Clutch ..... 36

Transmission ..... 32

Rear Wheel ..... 65

## OVERALL GEAR RATIOS

### Softail Models

First (Low) Gear ..... 9.482 Fourth Gear ..... 3.607

Second Gear ..... 6.463 Fifth Gear ..... 2.925

Third Gear ..... 4.960

### DYNA Models

First (Low) Gear ..... 10.212 Fourth Gear ..... 3.885

Second Gear ..... 6.961 Fifth Gear ..... 3.150

Third Gear ..... 5.051

## TIRE DATA



**WARNING**

For your personal safety, tires, rims and air valves must be correctly matched to wheel rims. See your Harley-Davidson dealer. Mismatching tires, tubes, rims and air valves may result in damage to the tire bead during mounting or may allow the tire to slip on the rim,

possibly causing tire failure. In addition, using tires other than those specified may adversely affect motorcycle stability. Use only tube tires on all Harley-Davidson laced (wire spoked) wheels and tubeless type tires on all Harley-Davidson cast and disc wheels. Protective rubber rim strips must be used with tube type tires when mounted on laced (wire spoked) wheels. Tire sizes are molded on the tire sidewall. Tube sizes are printed on the tube.

1995 VEHICLES DUNLOP TIRES ONLY		TIRE PRESSURE PSI (COLD)	
		FRONT	REAR
Solo Rider	FLSTC/F/N	36	36
Solo Rider & One Passenger	FLSTC/F/N	36	40
Solo Rider	FXSTC/S/B	30	36
Solo Rider & One Passenger	FXSTC/S/B	30	40
Solo Rider	FXD/L/WG/CON	30	36
Solo Rider & One Passenger	FXD/L/WG/CON	30	40

 **WARNING**

- Dunlop front and rear tires for Harley-Davidson

motorcycles are not the same. They are not interchangeable. Use the front tire **ONLY** for a front tire. **DO NOT** put a rear tire on the front of a vehicle.

- Maximum inflation pressure must not exceed specification on tire sidewall.

## FUEL

Use a good quality leaded or unleaded gasoline (at least 87 pump octane). Octane rating is usually found on the pump.

 **WARNING**

Remove fuel filler cap slowly. Fill fuel tank slowly to prevent spillage. Do not overfill. Do not fill above the bottom of the filler neck insert. Leave air space to allow for fuel expansion. Expansion can cause an overfilled tank to overflow gasoline through the filler cap onto surrounding areas. After refueling, be sure fuel filler cap is securely tightened.

 **CAUTION**

- Using gasoline that has an alcohol additive, such as methanol, may cause fuel system rubber components' failure and/or engine damage.
- Gasohol spills can stain the paint on your Harley-Davidson.

Today's service station pumps are increasingly of the higher capacity variety. With the high flow of gasoline into a motorcycle tank, air entrapment and pressurization is a possibility. The pressurized air may force gasoline to escape through whatever opening is available within the filler tube. This may not only soil clothing, but may create a potential fire hazard.

## **GASOLINE/ALCOHOL BLENDS**

- Your motorcycle was designed to obtain the best performance and efficiency using unleaded gasoline. Some fuel suppliers sell gasoline/alcohol blends as a fuel. The type and amount of alcohol added to the fuel is important.
- **DO NOT USE GASOLINES CONTAINING METHANOL.** Using gasoline/methanol blends will result in starting and driveability deterioration and damage to critical fuel system components.
- Gasolines containing METHYL TERTIARY BUTYL ETHER (MTBE): Gasoline/MTBE blends are a mixture of gasoline and as much as 15% MTBE. Gasoline/MTBE blends can be used in your motorcycle.
- ETHANOL (Grain alcohol) is a mixture of 10% ethanol and 90% unleaded gasoline. It is identified as "gasohol", "ethanol enhanced", or "contains ethanol". Gasoline/ethanol blends can be used in your motorcycle.

Because of their generally higher volatility, these blends may

adversely affect the starting, driveability and fuel efficiency of your motorcycle. If you experience these problems, Harley-Davidson recommends you operate your motorcycle on straight, unleaded gasoline.

## **CATALYTIC CONVERTERS**

California model 1340cc motorcycles are equipped with catalytic converters.

### **WARNING**

**Do not operate a catalytic converter-equipped vehicle with engine misfire or a non-firing cylinder. If you operate the vehicle under these conditions, the exhaust will become abnormally hot, which can cause personal injury.**

### **CAUTION**

- **Do not operate catalytic converter-equipped vehicle with engine misfire or a non-firing cylinder. If you operate the vehicle under these conditions, the exhaust will become abnormally hot, which can cause vehicle damage, including emission control loss.**
- **You must use ONLY unleaded fuel in California model catalytic converter-equipped motorcycles. Using leaded fuel will damage the emissions control system.**



## BULB CHART - FLSTC/F/N, FXSTC/S/B

LAMP DESCRIPTION ALL LAMPS 12 V	NUMBER OF BULBS (REQUIRED)	CURRENT DRAW (AMPERAGE)	HARLEY-DAVIDSON PART NUMBER
Headlamp			
FLSTC/F/N	1	4.7/4.3	67713-86
FXSTC/S/B	1	4.7/4.3	67697-81
Tail and Stop Lamp	1		68168-89
Tail Lamp		0.59	
Stop Lamp		2.10	
Passing Lamp	2	2.34X3	68674-69
Turn Signal Lamp			
Front/Running	2	2.10/0.59	68168-89
Rear	2	2.10	68572-64B
Fender Tip Lamps	2	0.10	53439-79
Instrument Panel Lamps			
High Beam Indicator	1	0.04	71092-68A
Oil Pressure Indicator	1	0.08	68462-64
Neutral Indicator	1	0.08	68462-64
Turn Signal Indicator	2	0.08	68462-64
Speedometer	1	0.27	71090-64

## BULB CHART - FXD/L/WG/CON

LAMP DESCRIPTION ALL LAMPS 12 V	NUMBER OF BULBS (REQUIRED)	CURRENT DRAW (AMPERAGE)		HARLEY-DAVIDSON PART NUMBER	
Headlamp					
High Beam	1	4.7/4.3		67713-86	
Low Beam	1	4.7/4.3		67697-81	
Tail and Stop Lamp	1			68168-89	
Tail Lamp		0.59			
Stop Lamp		2.10			
Passing Lamp	2	2.34X3		68674-69	
Turn Signal Lamp					
Front/Running	2	2.10/0.59		68168-89	
Rear	2	2.10		68572-64B	
Instrument Panel Lamps		FXD/CON	FXDL	FXD/CON	FXDL
High Beam Indicator	1	0.15	0.07	68024-94	68023-92
Oil Pressure Indicator	1	0.15	0.07	68024-92	68020-92
Neutral Indicator	1	0.15	0.07	68024-92	68024-92
Turn Signal Indicator	2	0.15	0.22	68024-92	68021-92
Speedometer	1	0.27	0.22	52440-94	52440-94
Odometer	1	0.19	-	52439-94	52439-94
Tachometer	1	0.22	0.22	52441-95	52441-95
Fuel Gauge - FXD/L	1	0.12	0.12	67136-85	67136-85
- FXD CON	1	0.19		53439-79	
- FXDWG	1	0.12		67136-85	

# NOTES

The Sportster section contains the vehicle specifications for the following Harley-Davidson models:

XLH 883

XLH 883 Deluxe

XLH 883 Hugger

XLH 1200

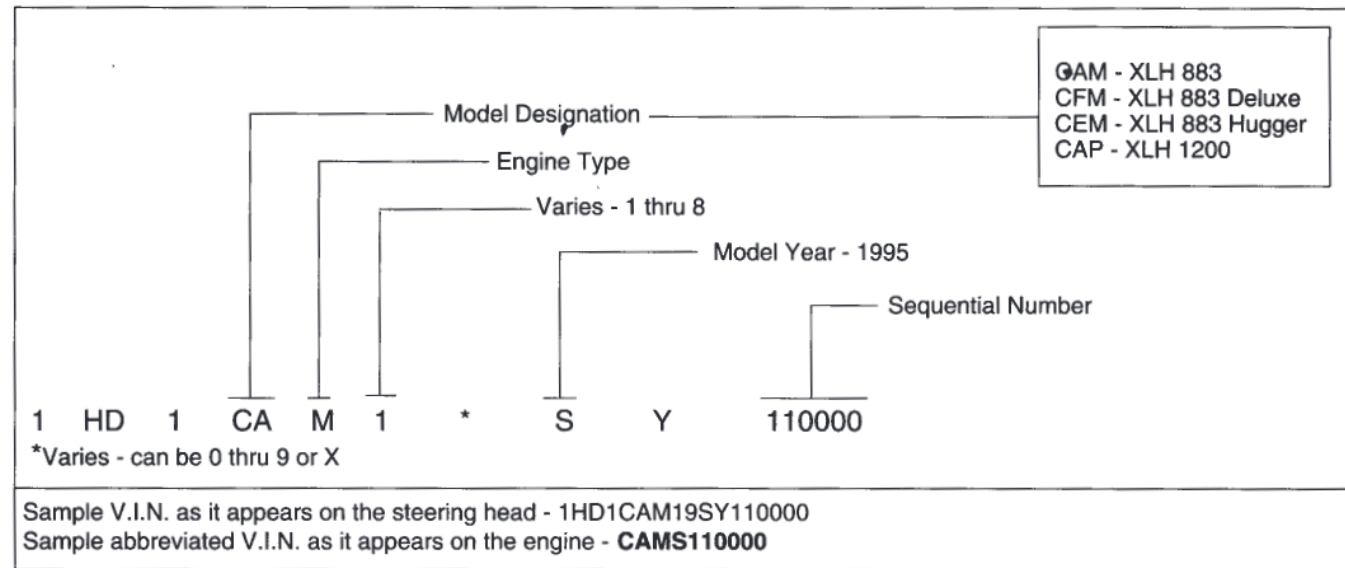
# NOTES

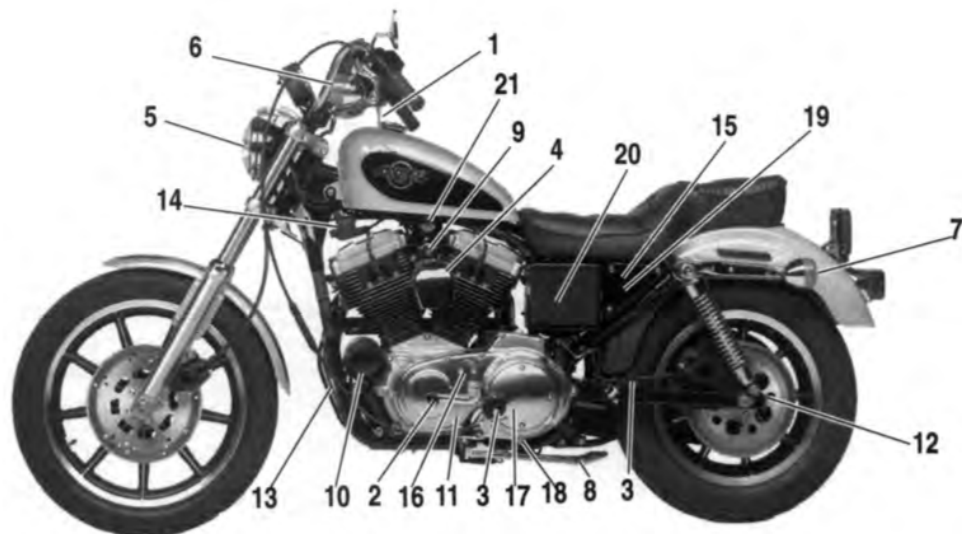
## VEHICLE IDENTIFICATION NUMBER (V.I.N.)

The full 17 digit serial, or Vehicle Identification Number (V.I.N.) is stamped on the steering head and on a label located on the right front frame downtube. An abbreviated V.I.N. is stamped on the left side crankcase at the base of the rear cylinder.

### NOTE

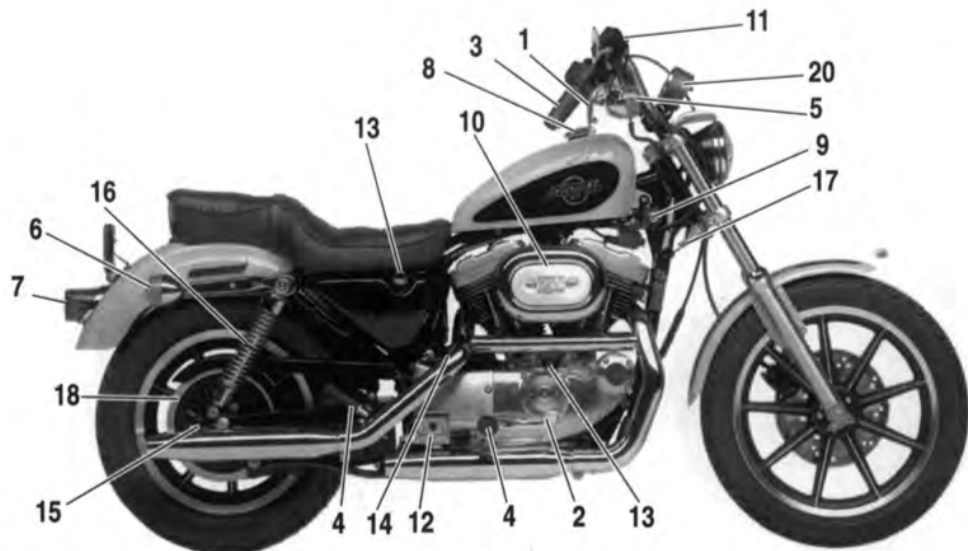
*Always give the full 17 digit Vehicle Identification Number when ordering parts or making any inquiry about your motorcycle.*





- |                                     |  |                                       |
|-------------------------------------|--|---------------------------------------|
| 1. Clutch hand lever                | 9. Carburetor enricher knob            | 16. Primary chain inspection plug     |
| 2. Gear shifter                     | 10. Engine oil filter                  | 17. Clutch inspection cover           |
| 3. Footrest(s)                      | 11. Primary chain cover                | 18. Primary & transmission drain plug |
| 4. Horn                             | 12. Rear axle adjuster                 | 19. Engine oil tank drain hose        |
| 5. Headlamp                         | 13. Voltage regulator                  | 20. Battery                           |
| 6. Front turn signal & running lamp | 14. Ignition coil                      | 21. Fuel supply valve                 |
| 7. Rear turn signal lamp            | 15. Ignition module (under side cover) |                                       |
| 8. Jiffy stand                      |  |                                       |

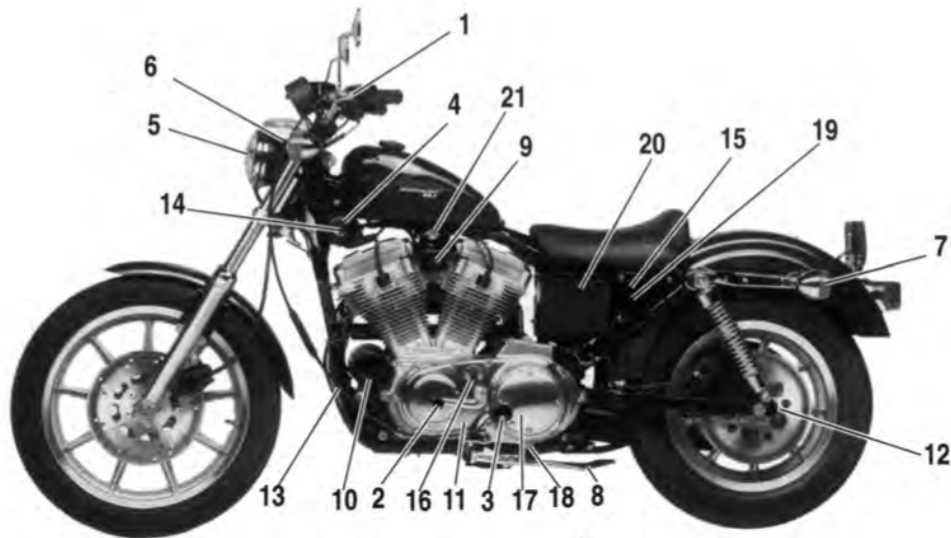
Sportster 1200 (XLH) - Left Side View



- |                                     |   |                                 |
|-------------------------------------|---|---------------------------------|
| 1. Front brake hand lever           | 9. Ignition/light key switch                | 14. Electric starter motor      |
| 2. Rear brake pedal                 | 10. Carburetor/air cleaner                  | 15. Rear axle adjuster          |
| 3. Throttle control grip            | 11. Front brake master cylinder & reservoir | 16. Shock absorber(s)           |
| 4. Footrest(s)                      | 12. Rear brake master cylinder & reservoir  | 17. Fork lock brackets          |
| 5. Front turn signal & running lamp | 13. Engine oil fill plug & dipstick         | 18. 19. Rear sprocket & drive   |
| 6. Rear turn signal lamp            |   | 19. Timing inspection hole plug |
| 7. Tail/stop lamp                   |   | 20. Speedometer/tachometer      |
| 8. Fuel filler cap                  |   |                                 |

Sportster 1200 (XLH) - Right Side View



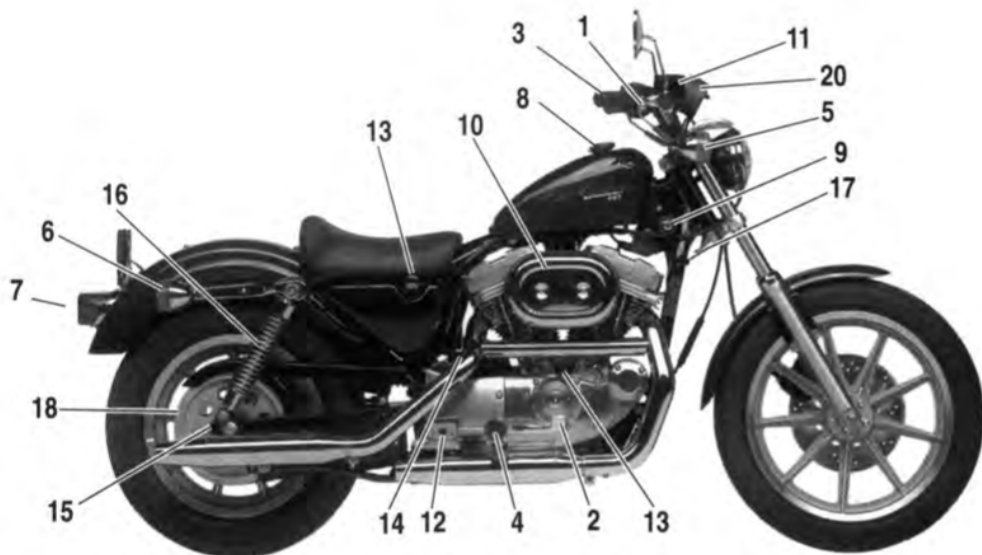


- 1. Clutch hand lever
- 2. Gear shifter
- 3. Footrest(s)
- 4. Horn
- 5. Headlamp
- 6. Front turn signal & running lamp
- 7. Rear turn signal lamp
- 8. Jiffy stand

- 9. Carburetor enrichener knob
- 10. Engine oil filter
- 11. Primary chain cover
- 12. Rear axle adjuster
- 13. Voltage regulator
- 14. Ignition coil
- 15. Ignition module (under side cover)

- 16. Primary chain inspection plug
- 17. Clutch inspection cover
- 18. Primary & transmission drain plug
- 19. Engine oil tank drain hose
- 20. Battery
- 21. Fuel supply valve

Sportster 883 (XLH) - Left Side View (Typical)



1. Front brake hand lever

2. Rear brake pedal

3. Throttle control grip

4. Footrest(s)

5. Front turn signal & running lamp

6. Rear turn signal lamp

7. Tail/stop lamp

8. Fuel filler cap

9. Ignition/light key switch

10. Carburetor/air cleaner

11. Front brake master cylinder & reservoir

12. Rear brake master cylinder & reservoir

13. Engine oil fill plug & dipstick

14. Electric starter motor

15. Rear axle adjuster

16. Shock absorber(s)

17. Fork lock brackets

18. 19. Rear sprocket & drive

19. Timing inspection hole plug

20. Speedometer

Sportster 883 (XLH) - Right Side View (Typical)

# NOTES

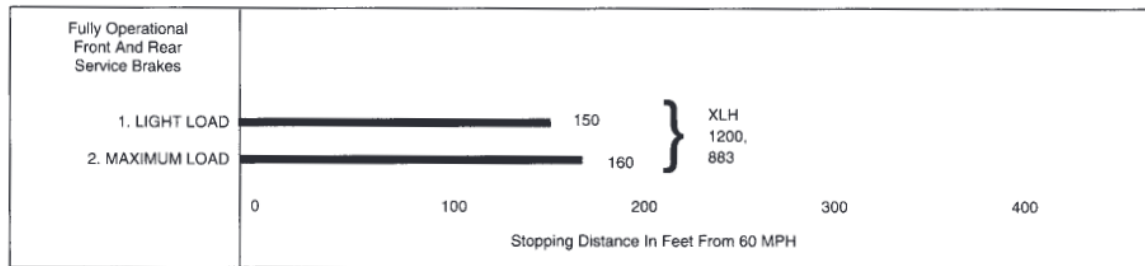
## STOPPING DISTANCE

Description of vehicle: Harley-Davidson 1995 XLH 1200 and 883 models.

Required by Federal Consumer Information Regulations.

Notice: The information presented represents results obtainable by skilled riders under controlled road and vehicle conditions. The information may not be correct under other conditions.

These figures indicate braking performance that can be met or exceeded by the vehicle to which it applies, without locking the wheels, under different conditions of loading.



1. Light Load Vehicle Weight.....includes 200 lb. rider - no accessories.
2. Maximum Loaded Vehicle Weight.....includes 300 lb. rider and passenger plus full accessory load.

## DIMENSIONS (IN.)

	XLH 1200	XLH 883 & Deluxe	XLH 883 Hugger
Wheel Base .....	60.20	60.20	59.00
Overall Length .....	87.60	87.60	87.25
Overall Width .....	35.00	33.00/35.00	35.00
Road Clearance.....	6.70	6.70	4.50
Overall Height.....	49.75	47.50	49.75
Saddle Height.....	28.90	28.00/29.25	27.12

## WEIGHT (LBS.)

	XLH 1200	XLH 883 Deluxe	XLH 883 & Hugger
DRY WEIGHT (as shipped from the factory).....	490	494	488/485
GVWR .....	948	948	948
GAWR - Front.....	353	353	353
GAWR - Rear .....	595	595	595

### NOTE

*Gross Vehicle Weight Rating (GVWR) (maximum allowable loaded vehicle weight) and corresponding Gross Axle Weight*

*Ratings (GAWR) are given on a label located on the frame steering head.*

## CAPACITIES (U.S.)

### Fuel Tank

(Gallons) Total .....	883cc - 2.25
	1200cc - 3.25

Reserve.....	0.25
--------------	------

### Oil Tank

(Quarts) w/filter .....	3
-------------------------	---

### Transmission/Primary chaincase

(Ounces, approx.) .....	32
-------------------------	----

### Front Fork

Each (Ounces, wet) .....	9*
*Hugger.....	10.7

## IGNITION SYSTEM

### Timing Setting

1650-1950 RPM .....	35° BTDC
---------------------	----------

Battery .....	12 Volt, 19 amp. hr.
---------------	----------------------

### Spark Plugs

Type .....	HD-6R12
Size .....	12mm
Gap.....	0.038-0.043 in.

## ENGINE

Number of Cylinders .....2  
Type ..... 4-Cycle, 45 Degree V-Type  
Compression Ratio .....9.0 to 1

### SAE Horsepower

Brake Horse power @ RPM	Bore In. (mm)	Stroke In. (mm)	Displacement cu. In. (cc)	Torque lb-ft @ RPM
XLH 1200 66@5200	3.50 (88.9)	3.812 (96.8)	73.4 (1200)	72@4000
XLH 883 57@6000	3.00 (76)	3.812 (96.8)	53.9 (883)	53@4500

## TRANSMISSION

Type ..... Constant Mesh, Foot Shift  
Speeds ..... 5 Forward

## NUMBER OF SPROCKET TEETH (Primary Chain)

Engine .....35  
Clutch .....56

## NUMBER OF SPROCKET TEETH

Motorcycle	Transmission	Rear Wheel
883	27	61
1200	29	61

## OVERALL GEAR RATIOS

Gear	883	1200
First (Low).....	10.045.....	9.353
Second.....	7.325.....	6.820
Third.....	5.381.....	5.010
Fourth.....	4.395.....	4.092
Fifth.....	3.615.....	3.366

## TIRE DATA



**WARNING**

For your personal safety, tires, rims and air valves must be correctly matched to wheel rims. See your Harley-Davidson dealer. Mismatching tires, tubes, rims and air valves may result in damage to the tire bead during mounting or may allow the tire to slip on the rim, possibly causing tire failure. In addition, using tires other than those specified may adversely affect motorcycle stability. Use only tube tires on all Harley-Davidson laced (wire spoked) wheels and tubeless type tires on all Harley-Davidson cast and disc wheels. Protective rubber rim strips must be used with tube type tires when

mounted on laced (wire spoked) wheels. Tire sizes are molded on the tire sidewall. Tube sizes are printed on the tube.

**⚠WARNING**

Maximum inflation pressure must not exceed specification on tire sidewall.

1995 VEHICLES DUNLOP TIRES ONLY		TIRE PRESSURE PSI (COLD)	
		Front	Rear
Solo Rider	XLH - All	30	36
Rider & One Passenger	XLH - All	30	40

## FUEL

Use a good quality leaded or unleaded gasoline (at least 87 pump octane). Octane rating is usually found on the pump.

**⚠WARNING**

Remove fuel filler cap slowly. Fill fuel tank slowly to prevent spillage. Do not overfill. Do not fill above the bottom of the filler neck insert. Leave air space to allow for fuel expansion. Expansion can cause an overfilled

tank to overflow gasoline through the filler cap onto surrounding areas. After refueling, be sure fuel filler cap is securely tightened.

**⚠CAUTION**

- Using gasoline that has an alcohol additive, such as methanol, may cause fuel system rubber components' failure and/or engine damage.
- Gasohol spills can stain the paint on your Harley-Davidson.

Today's service station pumps are increasingly of the higher capacity variety. With the high flow of gasoline into a motorcycle tank, air entrapment and pressurization is a possibility. The pressurized air may force gasoline to escape through whatever opening is available within the filler tube. This may not only soil clothing, but may create a potential fire hazard.

## GASOLINE/ALCOHOL BLENDS

Your motorcycle was designed to obtain the best performance and efficiency using unleaded gasoline. Some fuel suppliers sell gasoline/alcohol blends as a fuel. The type and amount of alcohol added to the fuel is important.

- DO NOT USE GASOLINES CONTAINING METHANOL. Using gasoline/methanol blends will result in starting and

driveability deterioration and damage to critical fuel system components.

- ✦ Gasolines containing METHYL TERTIARY BUTYL ETHER (MTBE): Gasoline/MTBE blends are a mixture of gasoline and as much as 15% MTBE. Gasoline/MTBE blends can be used in your motorcycle.
- ✦ ETHANOL (Grain alcohol) is a mixture of 10% ethanol and 90% unleaded gasoline. It is identified as "gasohol",

"ethanol enhanced", or "contains ethanol". Gasoline/ethanol blends can be used in your motorcycle.

Because of their generally higher volatility, these blends may adversely affect the starting, driveability and fuel efficiency of your motorcycle. If you experience these problems, Harley-Davidson recommends you operate your motorcycle on straight, unleaded gasoline.



## BULB CHART - XLH

LAMP DESCRIPTION ALL LAMPS 12 V	NUMBER OF BULBS (REQUIRED)	CURRENT DRAW (AMPERAGE)	HARLEY-DAVIDSON PART NUMBER
Headlamp	1	4.7/4.3	67697-81
Tail and Stop Lamp	1		68168-89
Tail Lamp		0.59	
Stop Lamp		2.10	
Passing Lamp	2	2.34X3	68674-69
Turn Signal Lamp			
Front/Running	2	2.10/0.59	68168-89
Rear	2	2.10	68572-64B
Instrument Panel Lamps			
High Beam Indicator	1	0.15	68024-94
Oil Pressure Indicator	1	0.15	68024-94
Neutral Indicator	1	0.15	68024-94
Turn Signal Indicator	2	0.15	68024-94
Speedometer	2	0.27	52440-94
Odometer		0.19	52439-94
Tachometer	1	0.27	52441-95*

\*If applicable

## SAFE OPERATING RULES

Before operating your new motorcycle it is your responsibility to read and follow operating and maintenance instructions in this manual, and follow these basic rules for your personal safety.

- Know and respect the rules of the road (see RULES OF THE ROAD). Also read and observe the MOTORCYCLE SAFETY booklets that come with this Owner's Manual. You should also read and know the contents of the MOTORCYCLE HANDBOOK for your state.
- Use only genuine Harley-Davidson approved parts and accessories. Use of certain Screamin' Eagle® or other manufacturer's performance parts will void your new motorcycle warranty. See your dealer for details.
- Gasoline is extremely flammable and is explosive under certain conditions. Refuel in a well ventilated area with the engine turned off. Remove fuel filler cap slowly. Do not smoke or allow open flames or sparks when refueling or servicing the fuel system. Always close the fuel supply valve when the engine is not running to prevent flooding of the carburetor and the surrounding area with gasoline. Do not fill fuel tank above the bottom of the filler neck insert. Leave air space to allow for fuel expansion.
- Motorcycle exhaust contains poisonous carbon monoxide gas. Do not inhale exhaust gases and never run the engine in a closed garage or confined area.
- Before starting engine, check for proper operation of brake, clutch, shifter, throttle controls, correct fuel and oil supply.
- Be sure jiffy stand is fully retracted before riding the motorcycle. If jiffy stand is not fully retracted during vehicle operation, it could contact the road surface causing a momentary disturbance before retracting. This momentary disturbance could distract the rider, possibly causing loss of vehicle control.
- A new motorcycle must be operated according to special break-in procedure. (See BREAK-IN - THE FIRST 500 MILES.)
- Operate motorcycle only at moderate speed and out of traffic until you have become thoroughly familiar with its operation and handling characteristics under all conditions. If you are an inexperienced rider we recommend that you obtain information and formal training in correct motorcycle riding technique.
- Do not exceed the legal speed limit or drive too fast for existing conditions. Always reduce speed when poor driving conditions exist. High speed increases the influence of any other condition affecting stability and possibility of loss of control.

- Pay strict attention to road surfaces and wind conditions. Any two wheeled vehicle may be subject to upsetting forces. Wind blasts from passing trucks, holes in the pavement, rough road surfaces, rider control error, etc., may influence the handling characteristics of your motorcycle. If this happens, reduce speed and guide the motorcycle with a relaxed grip to a controlled condition. Do not brake abruptly or force the handlebar because this may aggravate an unstable condition. New riders should gain experience under various conditions while driving at moderate speeds.
- Operate your motorcycle defensively. Remember, a motorcycle does not afford the same protection as an automobile in an accident. One of the most common accident situations occurs when the driver of the other vehicle fails to see or recognize a motorcycle and turns left into the on-coming motorcyclist. Operate only with headlamp on.
- Wear an approved helmet, clothing and footgear suited to motorcycle riding. Bright or light colors are best for greater visibility in traffic, especially at night. Avoid loose, flowing garments and scarves.
- The exhaust pipes and mufflers get very hot when the engine is running and remain too hot to touch for some time after the engine is turned off. Wear clothing that will completely cover the legs when riding. Avoid contact

with the exhaust system.

- When carrying passengers, it is your responsibility to instruct them on proper riding procedures. (See Riding Tips for Motorcyclist included in your Owner's Kit.)
- Do not allow others, under any circumstances, to operate your motorcycle unless you are certain that they are experienced, licensed riders and are familiar with the operation of your particular motorcycle.
- When leaving motorcycle unattended, lock the steering head and remove ignition key from switch. Protect your motorcycle against theft.
- Safe motorcycle operation requires mental awareness and good judgment combined with a defensive driving attitude. Don't allow fatigue, alcohol or drugs to endanger your safety or the safety of others. Vehicles equipped with a sound system should have the volume adjusted to a nondistracting level before operating vehicle.
- Maintain your motorcycle in proper operating condition in accordance with the MAINTENANCE INTERVALS chart in this Owner's Manual. Particularly important to motorcycle stability is proper tire inflation pressure, tread condition, and proper adjustment of wheel bearings and steering head bearings. Do not operate motorcycle with a loose, worn or damaged steering system or front and

rear suspension system because handling will be adversely affected. Contact your dealer for repair of steering or suspension system wear or damage.

- Be sure all equipment required by federal, state, and local law is installed and in good operating condition.
- Maintain proper tire pressure and wheel and tire balance. Improper tire and wheel balance and abnormal tread wear can cause poor handling. Inspect your tires periodically. Replace tires with approved tires only. (See your Harley-Davidson dealer.)
- Do not exceed the Gross Vehicle Weight Rating of your motorcycle. Maximum allowable vehicle weights with rider and passenger are specified on the Identification Label affixed to your vehicle. Overloading, particularly at the rear of a motorcycle, can cause instability. Carefully check any approved accessories for the maximum weight capacities.
- Do not tow a trailer.
- Regularly inspect shock absorbers and front forks. Check for leaks. Worn parts can affect stability. If you have questions as to how these should function, see your Harley-Davidson dealer.

☞ Keep hazardous substances such as brake and battery fluids and cleaning compounds away from eyes and skin and out of mouth. Keep all hazardous substances out of the reach of children.

☞ Consult your dealer regarding any questions you may have about your motorcycle. Should any abnormality occur in the operation of your motorcycle, immediately contact your Harley-Davidson dealer for correction of the problem. Continued operation of a misperforming motorcycle will probably aggravate an initial problem, cause repairs to be more costly and perhaps affect your personal safety.

☞ The front and/or rear guard(s) may provide limited leg protection and cosmetic vehicle protection under unique circumstances (i.e., fall to the side while stopped, very slow speed slide). They are not made nor intended to provide protection in a collision with another vehicle or an object.

☞ The quality fasteners used in Harley-Davidson motorcycles have specific strength, finish and type requirements to perform properly in the assembly and its environment. Use only genuine Harley-Davidson replacement fasteners, tightened to the proper torque. Substitution could cause fastener failure which may result in personal injury.

- California vehicles, equipped with Evaporative Emission controls, have a plugged carburetor overflow fitting. The fuel supply valve on the vehicle should be turned off when the vehicle is not operating. If the fuel supply valve is not turned off when the vehicle is not operating, fuel can drain into the engine, dilute the engine oil and cause engine damage.
- Do not tow a disabled motorcycle with another vehicle. The steering and handling of the disabled motorcycle will be impaired because of the force on the tow line. Impaired handling can cause loss of control and possible personal injury. If a disabled motorcycle must be transported, use a truck or trailer.

## **RULES OF THE ROAD**

Keep on the right side of the road centerline when meeting other vehicles coming in the opposite direction. Ride to left of center of your lane to avoid possible oily pavement.

- Always sound your horn, actuate your turn signals and pass on the left side when passing other vehicles going in the same direction. Never try to pass another vehicle going in the same direction at street intersections, on curves, or when going up or down a hill.
- At street intersections give the right-of-way to the vehicle on your right. Do not presume too much when you have the right-of-way; the other driver may not know you have it.

- Always signal when preparing to stop, turn, or pass.
- All traffic signs, including those used for the control of traffic at intersections, should be obeyed promptly and to the letter. SLOW DOWN signs near schools and caution signs at railroad crossings should always be observed and your actions governed accordingly.
- When intending to turn to the left, signal at least 100 feet before reaching the turning point. Move over to the centerline of the street (unless local rules require otherwise), slow down, enter the intersection of the street and then turn carefully to the left.
- Never anticipate a traffic light. When a change is indicated from GO to STOP (or vice versa) in the traffic control systems at intersections, await the change.
- While turning either right or left, watch for pedestrians as well as vehicles.
- Do not leave the curb or parking area without signaling and being sure that your way is clear to enter moving traffic. A moving line of traffic has the right-of-way.
- Be sure that your license plate is installed in the position specified by law and that it is clearly visible under all conditions. Keep it clean.
- Ride at a safe speed - a speed consistent with the type of highway you are on, and always note whether the road is dry, oily, icy or wet. Each varying condition on the

highway means adjusting your speed and driving habits accordingly.

## ACCESSORIES AND CARGO

### WARNING

The addition of accessories and additional weight to this motorcycle can affect the motorcycle's stability, handling characteristics, and safe operating speed. Because Harley-Davidson cannot test and make specific recommendations concerning every accessory or combination of accessories sold, the rider must be responsible for safe operation of the motorcycle when installing accessories or carrying additional weight. The following guidelines should be used when equipping a motorcycle and carrying passengers and cargo.

- The Gross Vehicle Weight Rating (GVWR) is shown on the information plate located on the frame steering head. GVWR is the sum of the weight of the motorcycle and accessories and the maximum weight of the rider, passenger and cargo that may be safely carried. Do not tow a trailer with this motorcycle. Do not exceed the Gross Vehicle Weight Rating as indicated on the frame label. Overloading the motorcycle or towing a trailer will cause unstable handling and reduced braking efficiency which

could result in an accident and personal injury.

- Keep cargo weight concentrated close to the motorcycle and as low as possible to minimize the change in the motorcycle's center of gravity. Distribute weight evenly on both sides of the vehicle and do not load bulky items too far behind the rider or add weight to the handlebars or front forks. Do not exceed 15 pounds maximum load in each saddlebag (12 pounds, FXDS-Con) or 25 pounds maximum in Tour-Pak. Improper loading can cause vehicle handling problems, leading to personal injury.
- Luggage racks are designed for lightweight items - do not overload racks.
- Be sure cargo is secure and will not shift while riding. Recheck load periodically.
- Accessories that change the operator's riding position may increase reaction time and affect handling.
- Additional electrical equipment may overload the motorcycle's electrical system and cause an unsafe operating condition.
- The front and rear guard may provide limited leg protection and cosmetic vehicle protection under unique circumstances (i.e., fall to the side while stopped, very slow speed slide). It is not intended to

provide protection in a collision with another vehicle or other object.

Large surfaces such as fairings, windshields, backrests, and luggage racks can adversely affect handling. These items should be designed and approved by Harley-Davidson specifically for the motorcycle model and be properly installed.

 **WARNING**

Softail models are special edition, custom motorcycles. They have been carefully designed and engineered to be ridden in the original configuration. **DO NOT** alter the handling characteristics of these motorcycles by adding weight, such as fairings or radios. Do not attempt "custom" alterations such as extended forks on the front end. Present Softail models are not designed for and must **NEVER** be used with a sidecar.

The FXSTS motorcycle was **NOT** designed for sidecar use. The springer fork was **NOT** designed for sidecar use. **DO NOT** use either the motorcycle or the springer fork for this purpose. Use of the vehicle or the fork for this purpose could cause personal injury.

The above constitute vehicle misuse. Vehicle misuse could adversely affect handling characteristics, posing a potential hazard to the rider.

 **WARNING**

The front end components of the Springer and their design relationships to each other are very important. Altering these relationships by modifying the springer front end could adversely affect the handling of the motorcycle and endanger the rider.

**DO NOT:**

- ❖ Alter the fender brackets to lower the fender. Doing this could allow the front wheel to bind on the fender during hard stops or big bumps.
- ❖ Replace the O.E.M. tire with a higher-aspect ratio tire. Doing this could allow the front wheel to bind on the fender during hard stops or big bumps.
- ❖ Replace the O.E.M. tire with a traditional-looking 16 in. front wheel, tire and front fender. In addition to above, this could adversely affect the handling characteristics of this motorcycle.

Harley-Davidson has designed and manufactured this special, custom front end according to our very stringent and well-tested standards. If you modify the Springer front end in any way that changes our original design, Harley-Davidson cannot and does not assume responsibility for mishaps resulting from these changes.

## NOTE

This Owner's Manual covers 1995 Harley-Davidson motorcycles. Some features explained are unique to certain models. These features may be available as accessories for your Harley-Davidson motorcycle. See your Harley-Davidson dealer for a complete list of accessories that will fit your model.

## NOTE

Refer to the side-view photographs in the front of the manual to locate the items discussed in this manual.

## IGNITION/LIGHT KEY SWITCH

### WARNING

DO NOT modify the ignition/light switch wiring to circumvent the automatic-on headlight feature. High visibility is an important safety consideration for motorcycle riders.

Be sure to record all your key numbers in the space provided at the front of this book on page ii.

See Figure 1 and Table 1. The ignition/light key switch controls electrical functions of the motorcycle.

### CAUTION

To prevent theft of your motorcycle, always lock ignition and remove key when motorcycle is left unattended.

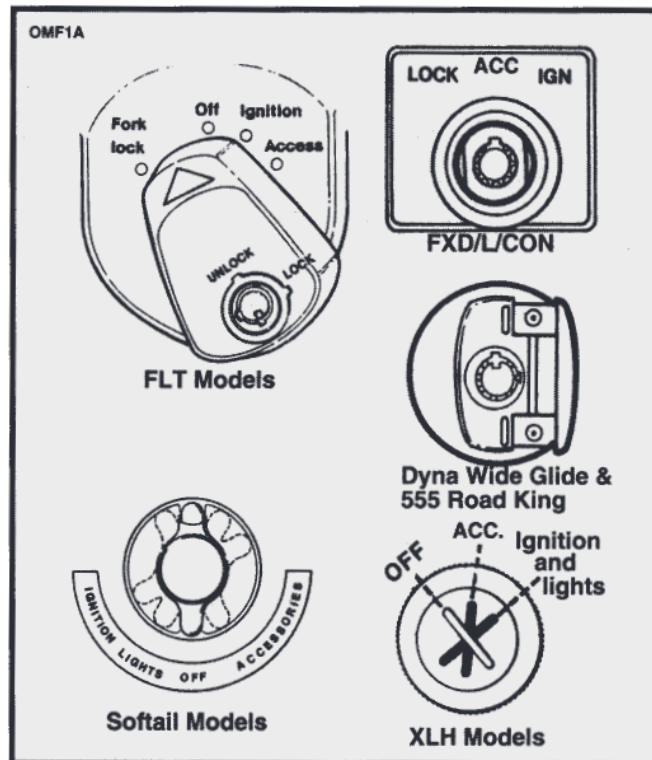


Figure 1. Ignition/Light Key Switch



**⚠ CAUTION**

Turn switch to OFF position and remove key before locking bike. If you leave the ignition in the ACC. position, the instrument lights will run down the battery.

**Table 1. Ignition/Light Switch (1 of 2)**

MODEL	LOCATION	SWITCH POSITIONS/FUNCTIONS
FLT	At bottom of instrument panel	<p>To unlock the switch and the front fork, push the key in and turn it counterclockwise. Press the lever down and turn it to the off position. Be sure you push key in to move key to either position. Press the lever down to move it to any position.</p> <p>To lock the fork, move fork to the full left position. Push down on lever and turn it to the left, to the FORK LOCK position. Remove the key.</p> <p>ACCESS - Accessories and hazard warning flasher can be turned on. Instrument lights are on. Brake light and horn can be activated. Key may be removed.</p> <p>The ignition, lights and accessories work when the switch is in the IGNITION position, as required by law in some localities.</p> <p style="text-align: center;"><i>NOTE</i></p> <p><i>Harley-Davidson recommends removing key from ignition/fork lock before operating motorcycle. If you do not remove key, key can fall out during operation.</i></p>
FLHR	On fuel tank instrument pane	<p>Switch is locked or unlocked by lifting switch cover, inserting key and turning key counterclockwise to lock, clockwise to unlock. Key may be removed in any position.</p> <p>OFF - Ignition, lights and accessories are off.</p> <p>ACCESSORIES - Accessories are on. Hazard warning flashers can be operated. Instrument lights are on. Brake light and horn can be activated.</p> <p>LIGHTS and IGNITION - Ignition, lights and accessories are on.</p>

**Table 1. Ignition/Light Switch (2 of 2)**

MODEL	LOCATION	SWITCH POSITIONS/FUNCTIONS
XLH	Behind frame steering neck (right hand side)	<p>OFF - Ignition and lights are off. Key may be removed.</p> <p>ACC. - Hazard warning flasher can be turned on. Instrument lights are on. Brake light and horn can be activated. Key may be removed.</p> <p>IGNITION - Push in and turn key. Ignition and lights are on.</p>
Softail	On fuel tank instrument panel	<p>Switch is locked or unlocked by lifting switch cover, inserting key and turning key counterclockwise to lock, clockwise to unlock. Key may be removed in any position.</p> <p>OFF - Ignition, lights and accessories are off. Key may be removed. Switch can be locked.</p> <p>ACCESSORIES - Accessories are on. Hazard warning flashers can be operated. Instrument lights are on. Brake light and horn can be activated.</p> <p>LIGHTS - Lights and accessories are on. Key may be removed.</p> <p>IGNITION - Ignition, lights and accessories are on. Key may be removed. Switch cannot be locked.</p>
FXDWG	On fuel tank instrument panel	<p>Switch is locked or unlocked by lifting switch cover, inserting key and turning key counterclockwise to lock, clockwise to unlock. Key may be removed in any position.</p> <p>OFF - Ignition, lights and accessories are off.</p> <p>ACCESSORIES - Accessories are on. Hazard warning flashers can be operated. Instrument lights are on. Brake light and horn can be activated.</p> <p>LIGHTS and IGNITION - Ignition, lights and accessories are on.</p>
FXD/L/ CON	Below seat (right hand side)	<p>OFF - Ignition and lights are off. Key may be removed.</p> <p>ACC. - Hazard warning flasher can be turned on. Instrument lights are on. Brake light and horn can be activated.</p> <p>IGNITION - Push in and turn key. Ignition, lights and accessories are on.</p>

## ELECTRIC STARTER SWITCH

See Figure 2. The electric starter switch (9) is located on the right handlebar control group. Put engine stop switch (10) in RUN position and transmission in neutral. Turn ignition ON and push the START switch to operate starter motor.

## ENGINE STOP SWITCH

See Figure 2. Engine stop switch (10) is located on the right handlebar control. The engine stop switch turns ignition ON or OFF and should be used at all times to stop the engine, especially in an emergency. To stop engine, push switch to position marked OFF - then turn key to OFF.

### NOTE

*Switch must be in RUN position to operate engine.*

## THROTTLE CONTROL GRIP

See Figure 2. The throttle control grip (11) is located on the right handlebar control group. Turn control grip clockwise to close throttle; turn control grip counterclockwise to open throttle.

A spring loaded friction adjusting screw is located at the bottom of the throttle grip clamp on all models except Ultras. Unscrew the knob (13) so throttle returns to idle position when hand is removed from throttle grip. Screw the knob in to increase friction on grip to provide a damping effect on throttle motion. This reduces rider fatigue on long trips, where steady speeds are maintained. The throttle friction screw should not be used under normal stop and go operating conditions.

### WARNING

**Do not overtighten the friction adjustment screw. Operation with the friction screw overtightened is not recommended because of the possible hazard involved when the engine will not return to idle automatically in an emergency.**

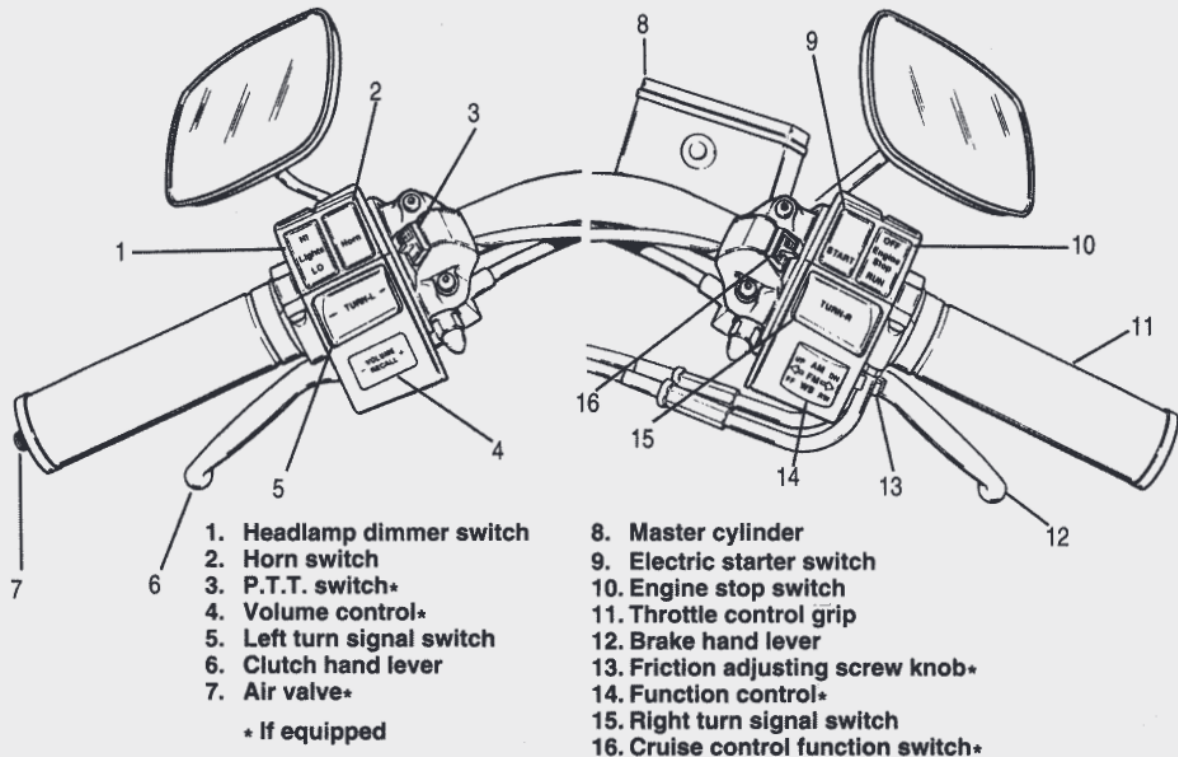


Figure 2. Handlebar Controls

# ENRICHENER

## CONSTANT VELOCITY (C.V.) CARBURETOR ENRICHENER - CARBURETED MODELS

A constant velocity carburetor uses an "enrichener" instead of a "choke". An enrichener is operated almost the same way as a choke. There are two differences:

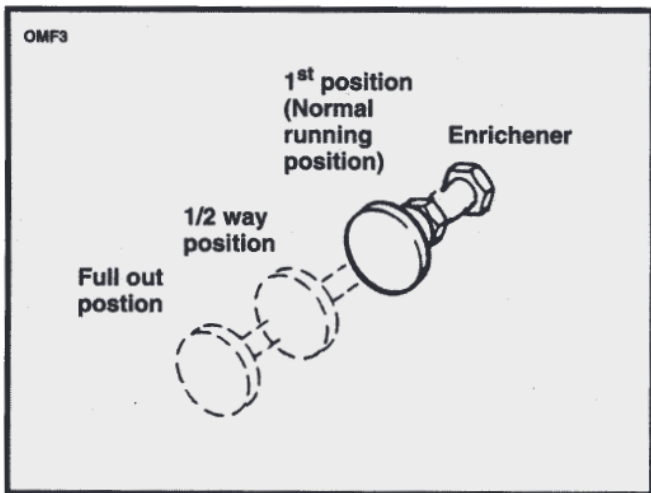


Figure 3. Setting the Enrichener

1. When starting a cold engine, the throttle control **MUST BE CLOSED** for the enrichener to work properly.
2. The enrichener does not have detents. The enrichener knob position can be adjusted from full in to full out.

See Figure 3. Engine speed increases as the enrichener knob is pulled out. By moving the enrichener knob, you adjust the air/fuel mixture to start a cold or warm engine.

Pull enrichener knob all the way out for cold engine starting. Change the enrichener knob position between full out or full in as the situation requires.

### NOTE

- See *OPERATION* for detailed starting procedures.
- Fuel injected models do not use an enrichener. See *OPERATION* for detailed starting procedures.

## CLUTCH HAND LEVER

### ⚠WARNING

**Be sure fingers are not positioned between hand control levers and handlebar grips or operation of these controls could be impaired.**

See Figure 2. The clutch hand lever (6) is located on the left handlebar where it is operated with the fingers of the left hand. Pull lever in against handlebar grip to disengage clutch; release the lever slowly to its outward position to engage clutch.

## GEAR SHIFTER

See Figure 4. The gear shifter is located on the left side, where it is operated with the toe of the left foot.

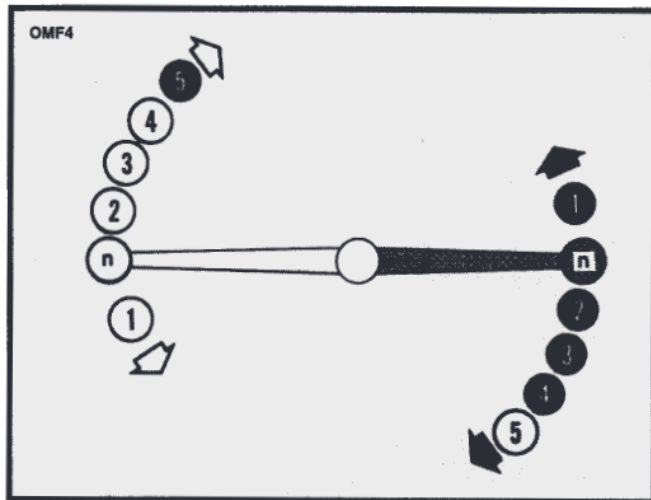


Figure 4. Gear Shifter

### NOTE

*Some motorcycles have a "heel-toe" shifter lever. With this shift lever, upshifts can be made with the heel of the left foot. Downshifts can be made with the toe*

Pushing lever all the way down (full stroke) shifts transmission to the next lower gear, while lifting lever all the way up (full stroke) shifts transmission into the next higher gear.

The operator must release the shift lever after each gear change to allow lever to return to its central position before another gear change can be made.

Neutral position is between first (low) and second gears. First gear is the last gear position that can be found by pushing lever full strokes downward. To shift from first gear to neutral, lift lever half its full stroke.

### NOTE

- *The gear shifter mechanism on 1340cc 5-speed motorcycles does not permit shifting the transmission to neutral from second gear. Neutral can only be engaged from first gear.*
- *The XLH 5-speed transmission can be shifted to neutral from either first or second gear.*

With the motorcycle standing still and the engine not running, it usually will be necessary to roll the motorcycle backward and forward with the clutch fully disengaged while maintaining a slight pressure on the foot shift lever before a shift from one gear to another can be made.

Even with the engine running and the motorcycle standing still, difficulty may be experienced in shifting gears. This difficulty arises when transmission gears are not turning and

shifting parts are not lined up to permit engagement.

When this difficulty is experienced, do not under any circumstances, attempt to force the shift. The results of such abuse will be a damaged or broken shifter mechanism.

Either roll the motorcycle as indicated above, or if the engine is running, engage the clutch very slightly while applying light pressure to the shifter lever to make the shift. Both of these procedures set transmission gears in motion and then the shift can be made easily. See Shifting Gears in the OPERATION section.

## BRAKES

The brake pedal controls the rear wheel brake and is located on the motorcycle's right side. It is operated by the right foot. See Figure 2. The brake hand lever (12) controls the front wheel brake and is located on the right handlebar. It is operated by the fingers of the right hand.

Brakes should be applied uniformly and evenly to prevent wheels from locking up. A balance between rear and front braking is generally best.

### **WARNING**

**Do not apply either brake strongly enough to lock the wheel. This may cause the wheel to skid with possible loss of control of the motorcycle.**

## HORN SWITCH

See Figure 2. The horn is operated by the horn switch (2) on the left handlebar control group.

## HEADLAMP DIMMER SWITCH

See Figure 2. The headlamp dimmer switch (1) on the left handlebar controls the headlamp high and low beams.

### *NOTE*

*The beam (blue) indicator light remains lit when high beam is on.*

## PASSING LAMP SWITCH - FLT, FLHR FLSTC MODELS

See Figure 5. Use the passing lamp switch to turn on the passing lamps as required.

### *NOTE*

- *On the FLHT/C/Ultra/I, the passing lamp switch is on the right, inside of the fairing.*
- *On the FLSTC, the passing lamp switch is on the left, inside of the triple clamp shroud.*
- *On the FLHR, the passing lamp switch is on the right, inside of the triple clamp shroud.*
- *The passing lamps do not work when the headlamp is on high beam.*

# CRUISE CONTROL - ULTRA MODELS

## Theory of Operation

The Harley-Davidson cruise control is designed to be safely operated with minimum movement by the rider. It has been designed so all rider control actions are natural and easy.

### NOTE

- Remember; the rider always over-rides and controls the system.
- The system will not work at vehicle speeds below 30 mph.
- The system is managed by a small computer that gets its operation information from VEHICLE SPEED, via the speedometer. The tachometer provides information to disengage the system if engine rpm's suddenly increase (disengage clutch, slippery or icy roads).
- Besides the computer, the system has other components: a stepper-motor (controlled by the computer), which operates the throttle during CRUISE operation, a clutch which disengages the stepper-motor during non-cruise operation and several internal switches, all sending information to the computer.
- The system will allow rider to increase speed 10 mph or

*more (depending on how hard the rider rolls on the throttle and the condition of the bike) over the "SET" point before de-activating. This feature allows the rider to momentarily increase speed, if necessary. Rolling on the throttle to greatly increase speed may de-activate the system.*

## Controls (Figures 2 and 5 and Table 2)

There are two rider-operated control switches:

1. An "ON/OFF" switch located:
  - FLTC Ultra - on the right front side of the instrument pod.
  - FLHTC Ultra - on the far right of the inner fairing.

This switch turns the system on or off.

### NOTE

*The red light will come on to indicate the system is **ON**. If the red light does **NOT** come on, the system is **NOT ON**, you cannot "SET" cruise speed - see your Dealer.*

2. "RESUME/SET" switch located in the right handlebar control group:



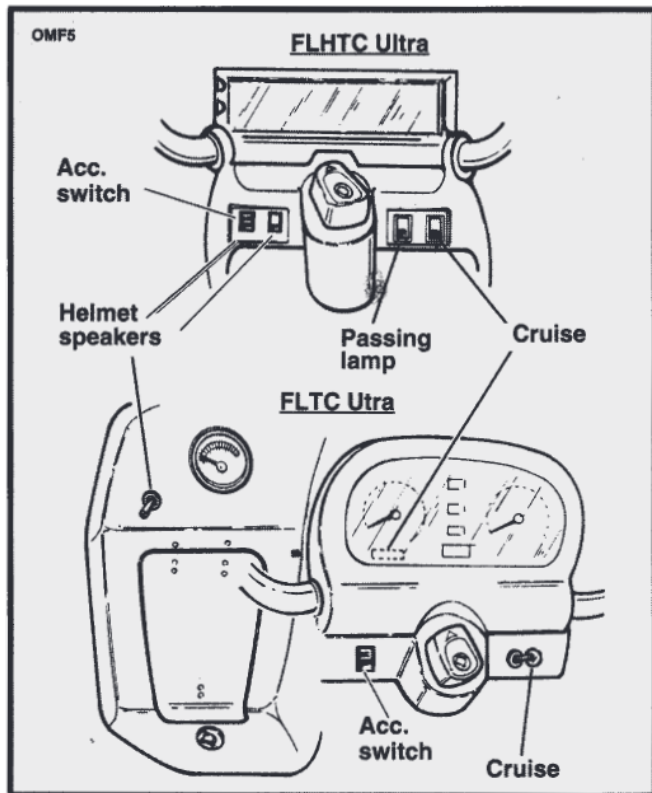


Figure 5. Cruise, Speakers, Acc., Passing Lamp Controls

See OPERATION. This switch controls several system functions, including: SET, RESUME, ACCELERATE and DECELERATE.

**NOTE**

*The switch is "self-centering". After you press the switch to the desired function it will return to the center (ready) position.*

**OPERATION**

**⚠ WARNING**

The cruise control system is not intended for use:

- In heavy traffic.
- On roads with sharp or blind curves.
- On slippery roads of any kind.

Using the cruise control in these circumstances can cause personal injury.

**Turn On the System:**

Turn the fairing/pod mounted "ON/OFF" switch to the ON position.

See Figure 5. The RED lamp on or near the switch, indicating CRUISE ON, will light.

### Activate the System:

#### Set:

1. Increase motorcycle speed to the desired cruise speed.
2. Momentarily press the "RESUME/SET" switch **DOWN** to set the speed. The system will quickly (approximately 1 1/2 seconds or less) begin to maintain the desired motorcycle speed.
3. See Figures 5 and 10. The GREEN lamp on the gauge panel, indicating CRUISE SET, will light.

#### Resume:

If the system has been deactivated (see DE-ACTIVATE/TURN OFF THE SYSTEM), you can resume the previously set speed by pressing the RESUME/SET switch **UP**.

#### NOTE

*The computer will hold the SET speed in its memory for the RESUME function until the system is turned OFF. If vehicle speed drops more than 15 mph below SET speed, speed can no longer be RESUMED.*

#### Accelerate, Decelerate:

1. The system has an "accelerate" function. If you are at your SET speed, press the switch **UP** and release to increase speed in 1 mph increments. Press and hold switch up to increase speed continuously at approxi-

mately 1 mph increments. System takes approximately 2 seconds to react.

2. The system has a "decelerate" function. If you are at your SET speed, press the switch **DOWN** and release to reduce speed in 1 mph increments. Press and hold switch down to decrease speed continuously at approximately 1 mph increments. System takes approximately 2 seconds to react.

#### NOTE

*The system will not accelerate more than 10 mph above the set speed. The system will decelerate until the set switch is released or is de-activated when speed goes below 30 mph.*

### DE-ACTIVATE/TURN OFF THE SYSTEM

#### De-Activate the System:

There are several ways to de-activate the system without turning it **OFF**:

- Roll the throttle **OFF - TO THE STOP**.
- Pull in the clutch lever (disengage the clutch).
- Engage either or both brake(s).

The above actions temporarily de-activate (disengage) the system. The system will still be **ON** and ready to operate if you **RESUME** or **SET** it again. The pre-set speed will remain in memory, ready for RESUME function. The GREEN lamp

on the gauge panel, indicating CRUISE SET, will turn off. The RED cruise control lamp will remain lit, indicating CRUISE ON.

#### Turn Off the System:

Turn the fairing/pod mounted "ON/OFF" switch **OFF** or turn off vehicle ignition. These actions turn the system **OFF** until you turn it **ON** again. Turning the system/ignition **OFF** also erases the previously set cruise speed from memory so you can program a new cruise speed when you next turn the system **ON**. Both the green and red cruise control indicator lamps will be off.

#### NOTE

*System WILL NOT work if:*

- *An uphill grade is so long and/or steep, the throttle cables are pulled their full length when the system tries to maintain vehicle speed. This feature prevents stretching the cables.*
- *Rider operates bike at vehicle speeds below 30 mph.*
- *Brake light bulbs are burned out.*
- *Throttle cables are too tight. (See Dealer.)*
- *Brake lights are on constantly. (See Dealer.)*
- *Front brake light switch is out of adjustment. (See Dealer.)*

## TURN SIGNAL SWITCHES - General

See Figure 2. The right handlebar turn signal switch (15) operates the right front and right rear flashing lamps. The left handlebar turn signal switch (5) operates the left front and left rear flashing lamps. Front turn signal lamps also function as running lamps.

### Turn Signal Switch Operation

The turn signal switches are controlled by a small microprocessor which gets its operation information from the speedometer and turn signal switches.

Momentarily depress the desired turn signal switch. The turn signal lamps will begin and continue flashing. When the microprocessor senses enough forward movement (a time period of approximately 6-10 seconds) from the speedometer, it cancels the turn signal lamps. If you are not moving forward, (for example; stopped at a stoplight) the turn signals will flash indefinitely.

#### NOTE

- *If you want the turn signals on longer; hold the switch in. The turn signals will begin flashing immediately, but the microprocessor will not begin computing distance until you release the switch.*
- *If you are signaling to turn in one direction and you depress the switch for the opposite turn signal, the first*

*signal is canceled and the opposite side begins flashing.*

If you want to stop the lamps from flashing, briefly depress the turn signal switch a second time. The turn signal lamps will stop flashing.

## **HAZARD WARNING 4-WAY FLASHER (Turn Signal Switches)**

The hazard warning 4-way flasher operates all four turn signal lamps at the same time. It is controlled by the turn signal switch microprocessor. The hazard warning flasher will operate when the ignition switch is in the ignition, lights or access position.

Turn on the hazard warning 4-way flasher by momentarily (approximately 1 1/2 seconds) depressing BOTH turn signal switches at once. Turn off the 4-way flasher the same way.

## **ACC. SWITCH**

See Figure 5. All FLT models, including the FLHR, have an accessory switch for the owner's use. There is an accessory connector, located under the seat, that can be activated with the ACC. switch. The switch is located on the left side of the fairing or triple clamp shroud. See your dealer for possible

uses.

## **SOUND SYSTEM CONTROLS**

See Figures 2, 5 thru 8 and Table 2 for sound system controls. For a more detailed explanation of the sound system controls, read the Harley-Davidson Premium Sound System Handbook.

### **WARNING**

**On ULTRA-GLIDES, if the C.B. is ON to monitor incoming transmissions and turned to low volume at the same time the stereo is ON, the C.B. can mute the stereo. If you have compensated for the muting effect by turning up the stereo, turning off C.B. will stop the muting effect and the stereo will be loud. This can be startling and possibly distract you from motorcycle operation. Turn music DOWN before turning OFF C.B.**

### *NOTE*

*Helmet speakers are NOT on the AVC (Automatic Volume Control) circuit.*

## Sound System Handlebar Controls Summary

Left - Volume / Recall Control	Right - Receiver / Tape Function Control
<p><b>Volume:</b> Forward (+) - Louder Back (-) - Softer</p> <p><b>Recall:</b> Press to show Receiver LCD display <b>NOT</b> being shown.</p> <p style="text-align: center;"><i>NOTE</i></p> <p><i>Set handlebar control to desired volume level; Automatic Volume Control (AVC) circuit will raise or lower volume as vehicle speed increases or decreases.</i></p>	<p style="text-align: center;"><b>Receiver Functions</b></p> <p>Push <b>IN</b> - AM / FM / WB Selection <b>DN</b> - Seek / Scan (Down scale) <b>UP</b> - Seek / Scan (UP scale)</p> <p style="text-align: center;"><b>Tape Functions</b></p> <p>Push <b>FF</b> - Fast Forward Tape (Fast Forward) <b>RW</b> - Rewind Tape (ReWind)</p>

## Ultra Glide - Sound System / Intercom / C.B. Controls Summary

Rider Manual Controls	Passenger Manual Controls
<p><b>Push To Talk Switch (PTT):</b> (Left handlebar) Press and hold to transmit on <b>C.B.</b> or speak on <b>Intercom</b> when <b>C.B.</b> &amp; intercom are <b>OFF</b>. (Over-rides &amp; mutes music on all speakers &amp; helmet speakers)</p> <p><b>Fairing/Pod switches:</b></p> <p style="margin-left: 20px;"><b>Left</b> - Switches music between helmet speakers or external speakers.</p> <p style="margin-left: 20px;"><b>Right</b> - Cruise control &amp; passing lamps</p>	<p>Controls rear speakers/amplifier, tuner &amp; intercom</p> <p><b>Volume control:</b> (Will not go louder than front amplifier/speakers)</p> <p><b>Tuner Function Control:</b></p> <p>(Bottom, side of right rear speaker enclosure)</p> <p>Includes Push To Talk Switch (PTT) for <b>Intercom</b> &amp; <b>C.B.</b> (Over-rides Mute/Sens <b>OFF</b>)</p> <p>Includes same functions as <b>RIGHT - Receiver / Tape Functions Control</b> above.</p>
Console Control Panel / C.B. / Intercom Controls	
(Left to right, top)	(Left to right, bottom)
<p><b>Up/Down:</b> Channel selector</p> <p><b>Channel:</b> C.B. channel display only</p> <p><b>Local/DX:</b> Local/Distance</p>	<p><b>C.B. Vol:</b> Reception volume control</p> <p><b>Vox/Sens:</b> On/off/Intercom/mic. sensitivity</p> <p><b>Squelch:</b> Tune to reduce noise</p>
Voice-Activated Control	
<p><b>Vox/Sens (Intercom) switch</b> must be <b>ON</b>. Turn knob clockwise to adjust mic. mute sensitivity to <u>your</u> voice. (Microphone will be live)</p>	<p>Speaking activates intercom system on helmet speakers. Vox/Sens knob adjusts mic. voice sensitivity. (Voice over-rides &amp; mutes music on <b>ALL</b> speakers including helmet.</p> <p><b>⚠WARNING:</b> IF <b>C.B.</b> is <b>ON</b> to monitor, at same time stereo is <b>ON</b>, it will mute the stereo. If you compensate for the muting effect by turning up the stereo, turning off <b>C.B.</b> will allow stereo to be very loud. Turn music <b>DOWN</b> before turning <b>OFF</b> <b>C.B.</b></p> <p style="text-align: center;"><i>NOTE: Helmet speakers are not on AVC circuit.</i></p>

OMF6

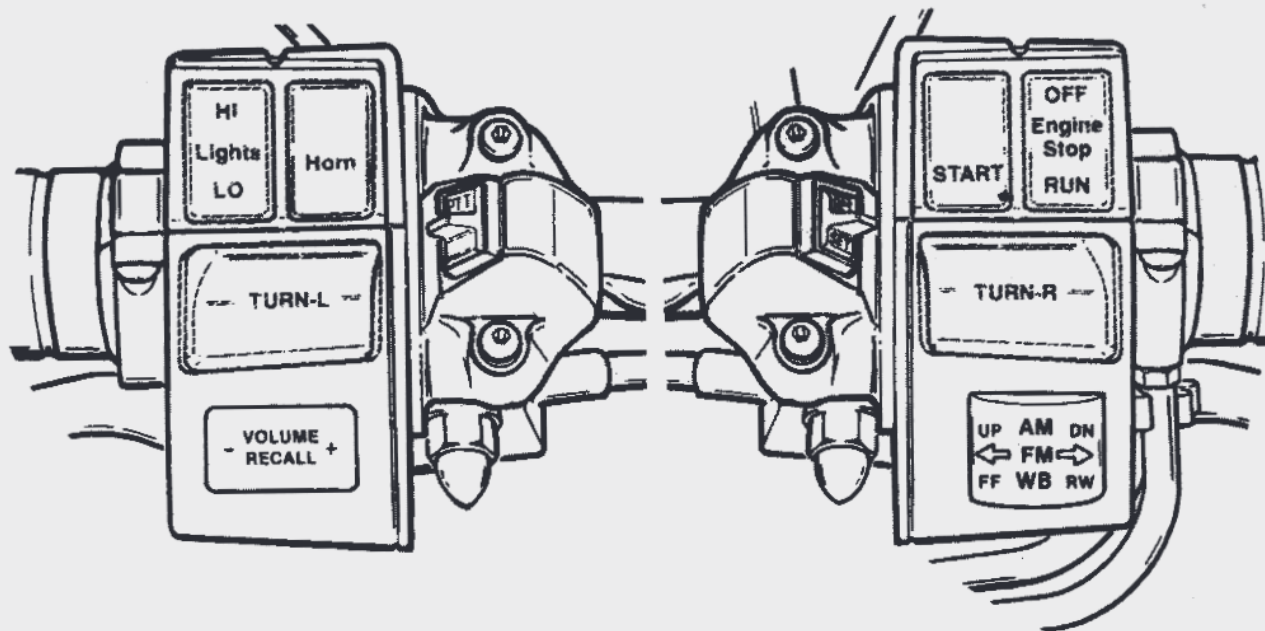


Figure 6. Sound System/Cruise Control Handlebar Controls

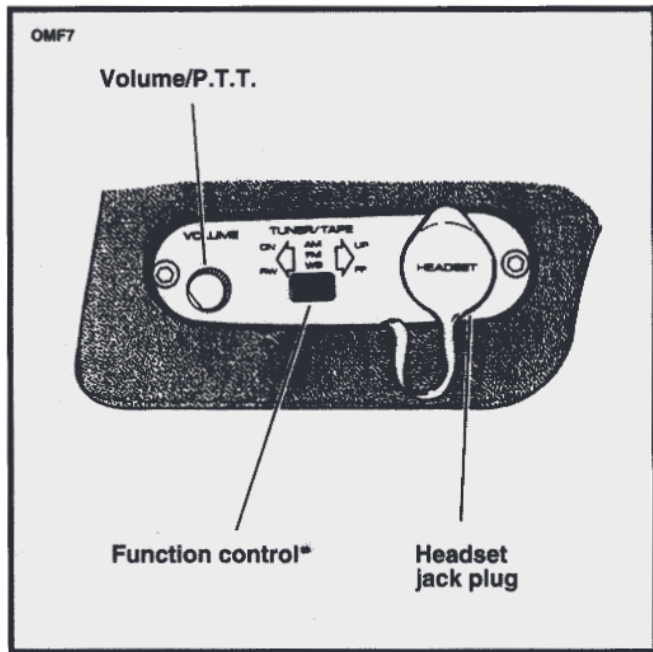


Figure 7. Passenger Controls (Bottom, Side of Right Rear Speaker)

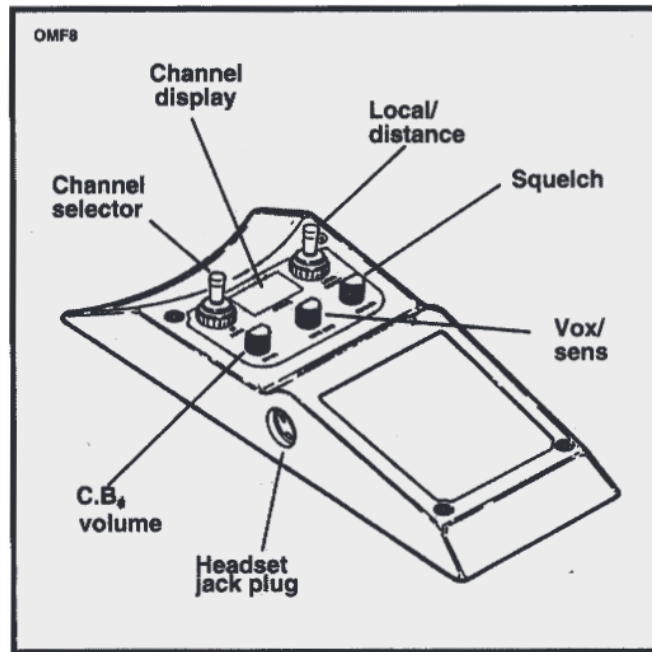


Figure 8. Console Control Panel

## INDICATOR LIGHTS

See Figure 9. Five or seven indicator lights are provided.

The **green** TURN indicators will flash when turn signals are activated. Whichever indicator flashes indicates chosen turn direction. When the 4-way hazard flashers are operating, both turn indicators will flash.

The **blue** BEAM indicator light, when lit, signals that the high beam headlamp filament is operating.

The **green** NEUTRAL light turns on to indicate when transmission is in neutral.

The **red** OIL indicator light, when lit, signals that oil is not circulating through the engine. The OIL indicator light will glow when the ignition is turned on prior to starting engine. With engine running, light should be off when engine speed is above idle.

If the oil pressure indicator light does not go off at speeds above idling, it is usually because of an empty oil tank or diluted oil. In freezing weather the oil feed may clog with ice and sludge, preventing oil circulation. A grounded oil signal switch wire, faulty signal switch, damaged or improperly installed check valve and/or trouble with the pump will also cause the light to remain illuminated.

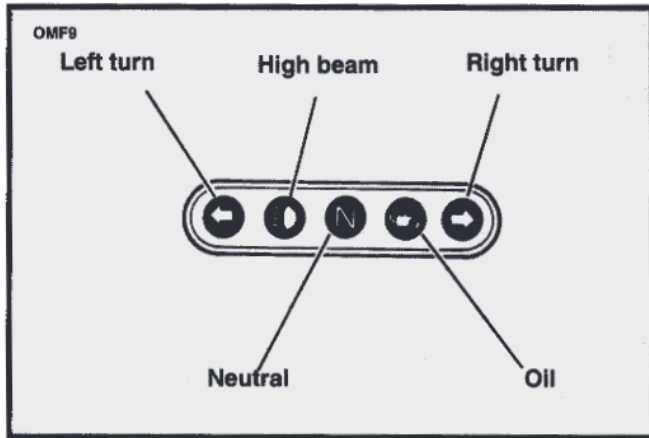


Figure 9. Indicator Lights (Typical)

### NOTE

*On Sportster models, if the ignition is turned on immediately after the engine is stopped, the oil light may not come back on because of oil pressure retained in the filter housing.*

### CAUTION

**If the oil pressure indicator light fails to go off, always check the oil supply first. If oil supply is normal and the light still does not operate normally, stop the engine at once and do not ride further until the trouble is located and the necessary repairs are made.**



## Ultra Models Indicator Lights

See Figures 5 and 11. Ultra models have two additional indicator lights: a red light on or near the cruise control switch, indicating cruise control on or off; and a green light on the gauge panel, indicating cruise control set or not set. See CRUISE CONTROL - ULTRA MODELS.

## SEQUENTIAL PORT FUEL INJECTED HARLEY DAVIDSONS

### INDICATOR LAMPS, Sequential Port Fuel Injected Harley-Davidsons (Figure 10)

Compared to other Harley-Davidsons, fuel injected Harleys have two additional indicator lamps; an ENGINE LAMP and a LOW FUEL L.E.D.

#### Engine Lamp

The engine lamp is located at the lower right side of the instrument cluster. Its purpose is to indicate whether or not the engine/engine management system is operating normally. The engine lamp color is RED.

The engine lamp normally comes on when the bike's ignition is first turned on and remains on for approximately 4 seconds, as the engine management system runs a series of self-diagnostics.

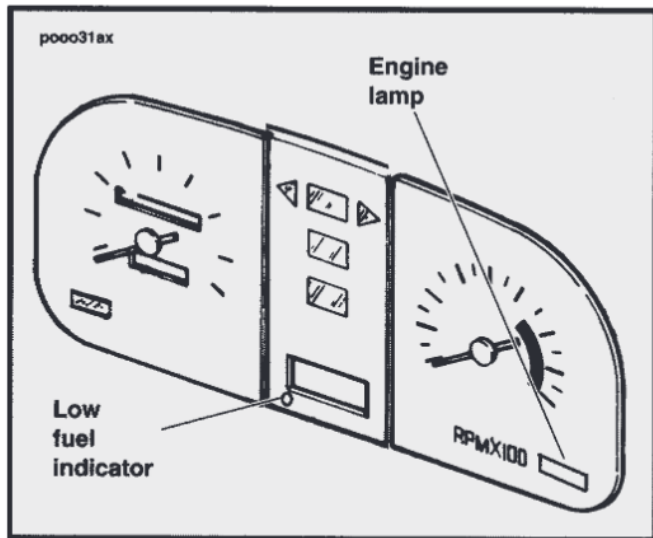


Figure 10. Sequential Port Fuel Injection Indicator Lamps

If the engine lamp comes on at any other time, see your Harley-Davidson dealer.

A blinking or continuously lit engine lamp indicates that an "event" has occurred relating to the engine/engine management system. See your Harley-Davidson dealer.

### Low Fuel L.E.D.

There is a low fuel LED, below and to the left side of the fuel gauge. The low fuel LED lights up to indicate that you have approximately 1/2 gallon of gasoline left in the tank. The low fuel lamp color is AMBER.

## TACHOMETER

See Figure 11. If vehicle is so equipped, the tachometer registers the engine speed in revolutions per minute (rpm).



Do not operate the engine above maximum safe RPM as shown in Table 5, OPERATION (red zone on tachometer). Engine damage may occur. Lower the RPM by upshifting to a higher gear or reducing the amount of throttle.

## MECHANICAL SPEEDOMETER/ ODOMETER

See Figure 11. The speedometer registers miles per hour of forward speed. The odometer registers the number of miles the vehicle has traveled.



Never travel at a speed faster than the posted speed limit. Excessive speed could cause possible loss of control.

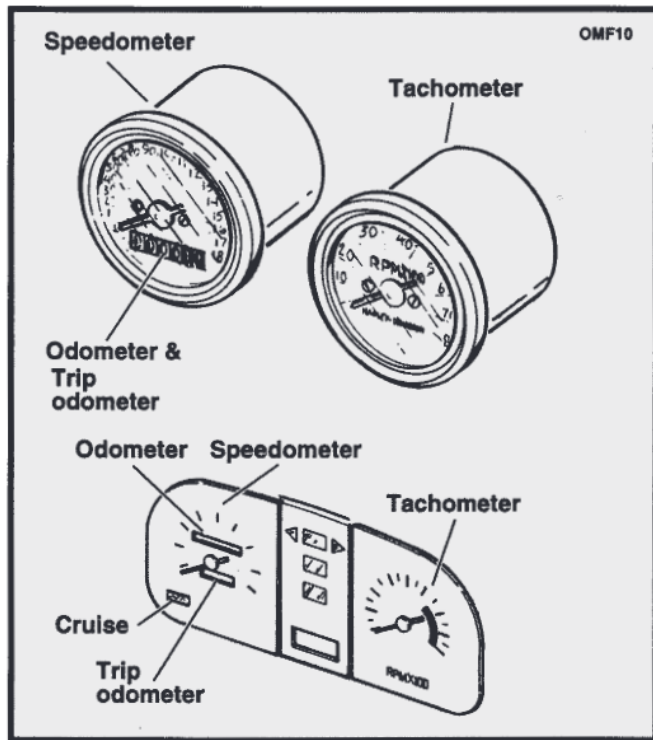


Figure 11. Speedometer, Odometer, Trip-odometer, Tachometer

**CAUTION**

Never attempt to tamper with or alter the vehicle odometer. This is illegal and the speedometer will be damaged.

## TRIP-ODOMETER (MECHANICAL)

Use the trip-odometer to register number of miles traveled on a trip or between refueling. Use the knurled knob on the speedometer or dash panel to reset the trip odometer to zero.

## ELECTRONIC SPEEDOMETER

The electronic speedometer has a single display window for both the odometer and trip-odometer.

Press the speedometer control (rubber covered) button, to change the display window on the speedometer face to either odometer or trip-odometer. To reset the trip-odometer to zero, press button to reset speedometer display to the ODOMETER mode and hold the button in for approximately 2 to 3 seconds. The speedometer will switch to the trip-odometer mode and reset the display to zero.

## MIRRORS (CONVEX)

See Figure 12. Your vehicle is equipped with convex mirrors. A convex mirror has a curved surface. This type of mirror is designed to give a much wider view to the rear than a flat mirror; however, cars and other objects seen in this type of mirror will look smaller and farther away than when seen in a flat mirror. Therefore you must use care when judging the

size or distance of objects seen in these mirrors.

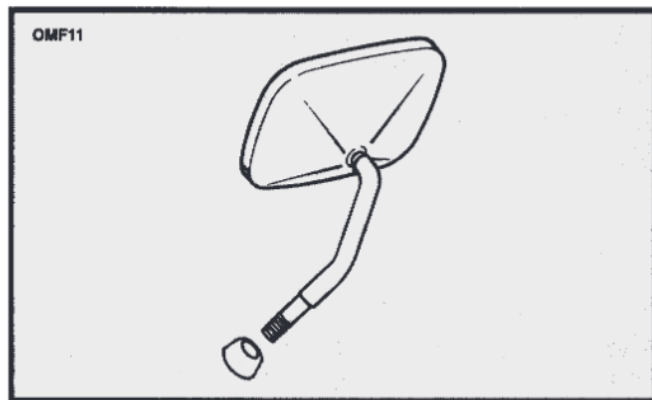
**WARNING**

**Objects in mirrors are closer than they appear.**

Adjust the mirrors to clearly reflect the area behind the motorcycle.

*NOTE*

*Adjust mirrors so you can see a small portion of your shoulders in each mirror. This will help you establish the relative distance of vehicles to the rear of your motorcycle.*



**Figure 12. Mirror**

## OIL PRESSURE GAUGE

The oil pressure gauge indicates engine oil pressure. Engine oil pressure will normally vary from 5 psi at idle speed to 12 - 15 psi at 50 mph when engine is at normal operating temperature.

## VOLTMETER

The voltmeter indicates electrical system voltage. With the engine running above 1500 rpm, the voltmeter should register 13 - 14.5 volts with battery at full charge.

## CLOCK (In Radio)

The clock runs continuously as long as there is battery power. See the Harley-Davidson Premium Sound System Handbook to reset clock.

## FUEL GAUGE

The fuel gauge indicates the approximate amount of fuel in the fuel tank(s).

### NOTE

*The Dyna Glide Low Rider and Road King models' left-side fuel cap is a fuel gauge only. Do not remove.*

## JIFFY STAND

See Figure 13. The jiffy stand is located on the left side of the motorcycle and swings outward to support the motorcycle for parking.

### CAUTION

Always park the motorcycle on a level, firm surface. Vehicle weight could cause motorcycle to fall over. Cosmetic damage could occur.

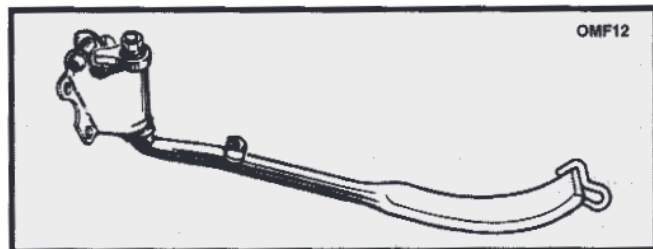


Figure 13. Jiffy Stand (Typical)

### WARNING

- Your vehicle is equipped with a side stand that locks when placed in the full forward (down) position and the vehicle weight is rested on it. Without vehicle weight resting on the side stand, any movement of the vehicle could cause the side stand to retract slightly from the full forward position. If the side stand is not in the full forward (lock) position when vehicle weight is rested on it, the vehicle could fall over, possibly causing injury.
- Be sure jiffy stand is fully retracted before riding the

motorcycle. If jiffy stand is not fully retracted during vehicle operation, it could contact the road surface causing a momentary disturbance before retracting. This momentary disturbance could distract the rider, possibly causing loss of vehicle control and possible injury.

## FORK LOCK

### WARNING

Do not operate vehicle with forks locked. This will restrict the vehicle's turning ability and could cause personal injury.

See Figure 14. The XLH and Softail models fork lock is located on the center of the lower front fork bracket. Turning fork to the left aligns hole in bracket with hole in steering head. A high strength padlock is available from your dealer to lock the fork in this position. Order Part No. 45737-72A.

Using the padlock will discourage unauthorized use or theft when parking your motorcycle.

See Figure 1. FLT models, excluding the FLHR (see below), have the fork lock incorporated in the Ignition/Light switch. See Table 1, IGNITION/LIGHT SWITCH.

See Figure 15. Dyna Glide models have the fork lock incorporated in the steering head on the right hand side.

See Figure 16. The Road King has a fork lock at the top of the steering head, behind the headlamp nacelle and inset in the handlebar clamp shroud.

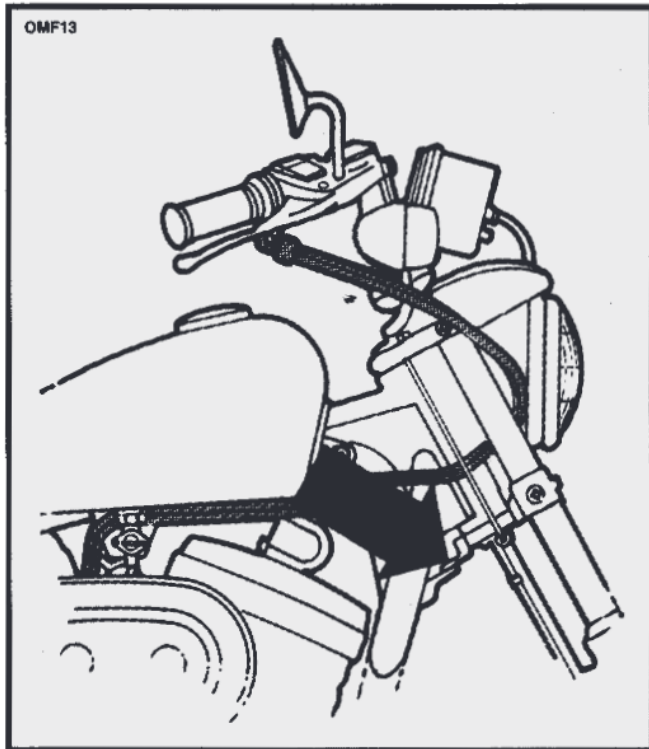


Figure 14. Fork Lock - Softail, XLH Models

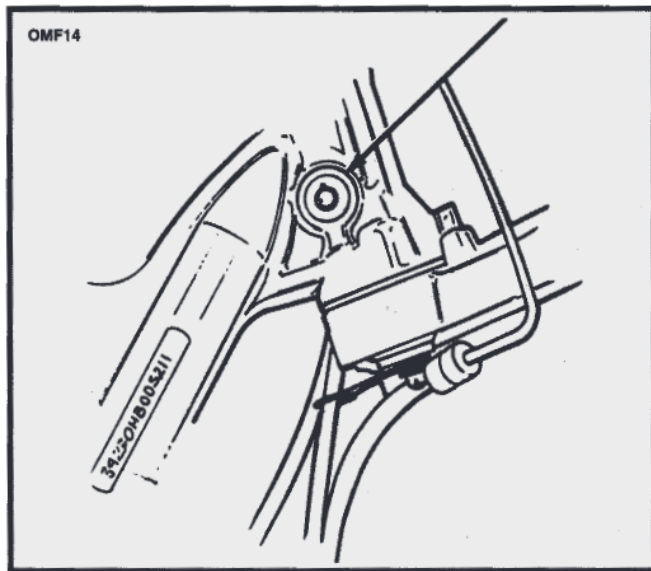


Figure 15. Dyna Glide Fork Lock

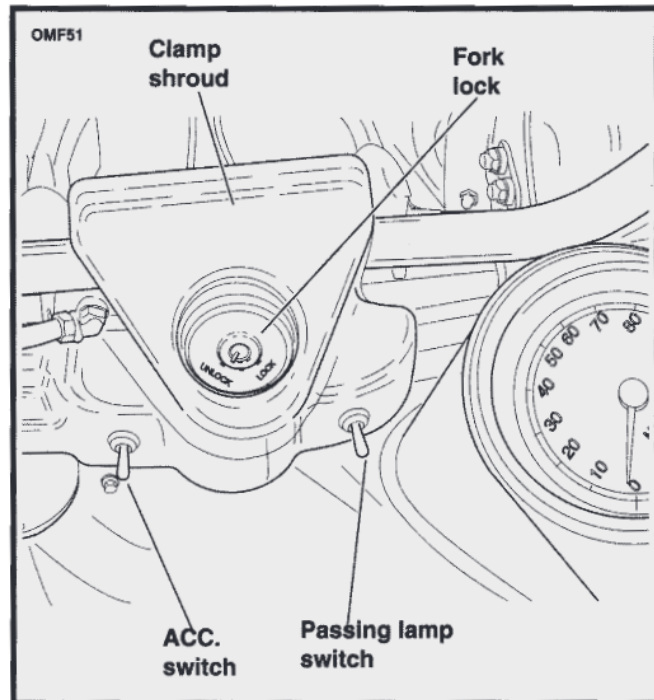


Figure 16. Road King Fork Lock

## FUEL SUPPLY VALVE - CARBU- RETED MODELS ONLY

See Figure 17. The fuel supply valve is located under the fuel tank. Fuel supply to carburetor is shut off when handle is in horizontal position or engine is turned off. Turning the handle down to vertical position turns on the main fuel supply; turning handle up to vertical position turns on reserve supply. Valve is vacuum-operated and will open and close when engine is turned on or off.

### CAUTION

California vehicles, equipped with Evaporative Emission controls, have a plugged carburetor overflow fitting. The fuel supply valve on the vehicle should be turned off when the vehicle is not operating. If the fuel supply valve is not turned off when the vehicle is not operating, fuel can drain into the engine, dilute the engine oil and cause engine damage.

### NOTE

*Sequential port fuel injected models do not have a fuel supply valve.*

### NOTE

*To always maintain a reserve supply, do not operate the motorcycle with the valve in the reserve (RES) position after refueling.*

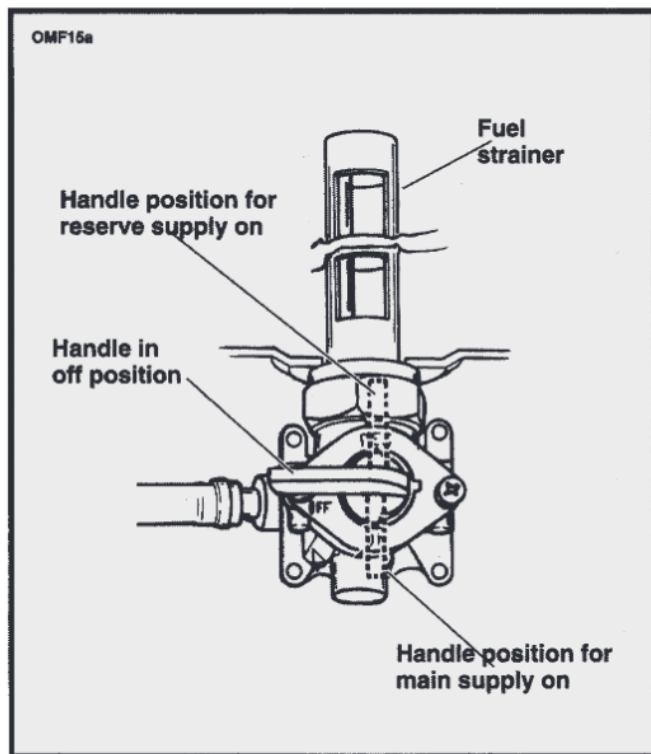


Figure 17. Fuel Supply Valve

## FUEL FILLER CAP (Figure 18)

To open, turn cap counterclockwise and lift up. To close turn cap clockwise until it clicks. The ratchet action of the fuel cap prevents overtightening.

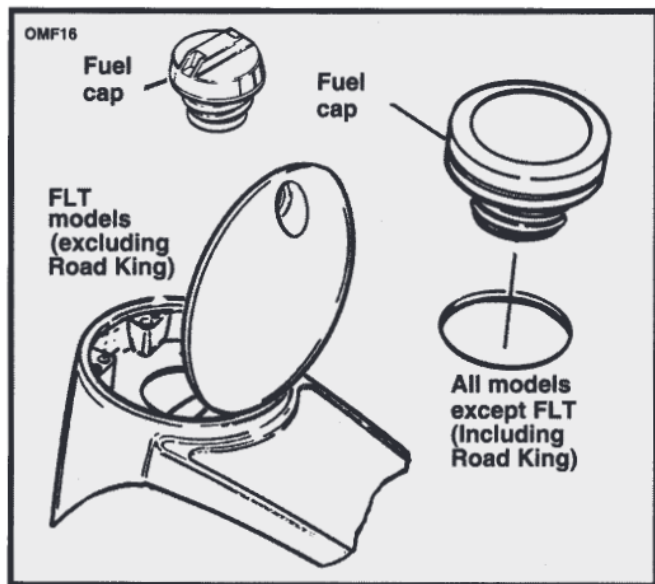


Figure 18. Fuel Filler Cap

### NOTE

- Fuel filler cap turns approximately 3/4 turn before it starts unscrewing.
- FLT models filler caps are located beneath a door and do not have a ratchet action. The filler cap should be fully closed before closing the fuel door.
- Softail models have a dual tank configuration. The left side tank cap has a left hand thread. Operation of fuel filler cap is the opposite of right hand fuel filler cap.

### ⚠WARNING

Remove fuel filler cap slowly. Fill fuel tank slowly to prevent fuel spillage. Do not fill above the bottom of the filler neck insert. Leave air space to allow for fuel expansion. Expansion can cause an overfilled tank to overflow fuel through the filler cap vent onto surrounding areas. After refueling, be sure filler cap is securely tightened.

### ⚠WARNING

Do not use decorative "spinner" or "bullet" type fuel cap covers, which may possibly cause the cap to loosen from the tank upon impact. Personal injury can also result from direct contact with cap covers.

### ⚠CAUTION

- Gasohol spills can stain the paint on your Harley-



Davidson.

- You must use **ONLY** unleaded fuel in California model catalytic converter-equipped motorcycles. Using leaded fuel will damage the emissions control system.

## SUSPENSION ADJUSTMENTS

Table 3 shows where to find instructions for suspension adjustments to your motorcycle.

**Table 3. Suspension Adjustments**

MODEL	ADJUSTMENT PROCEDURE
FLT Models	Procedure A
FLSTC/F/N, FXSTC/S/B Models	Procedure B
XLH, FXD Models	Procedure C

## PROCEDURE A AIR SUSPENSION ADJUSTMENTS

### FLT Models

See Figure 19. The FLT models feature air-adjustable sus-

pension. Air pressure may be varied to suit your own personal comfort. Lower pressure gives a softer ride and high pressure gives a firmer ride.

Table 4 shows recommended pressures for your riding comfort.

The front air suspension on all FLT models, except the Road King, features Harley-Davidson's unique Anti-Dive System. The purpose of this system is to reduce the amount of front fork deflection while braking.

The amount of anti-dive is automatically set as the air pressure in the system is adjusted. Higher pressure allows less front fork deflection (more anti-dive). Lower pressure allows more front fork deflection (less anti-dive).

The front air pressure is adjusted by adding or removing air from an air valve located at the left end of the handlebar, or at the left side, under the headlamp shroud (FLHR).

### CAUTION

**Front suspension pressures over 25 psi or less than 10 psi are not recommended. Damage to air control components can result.**

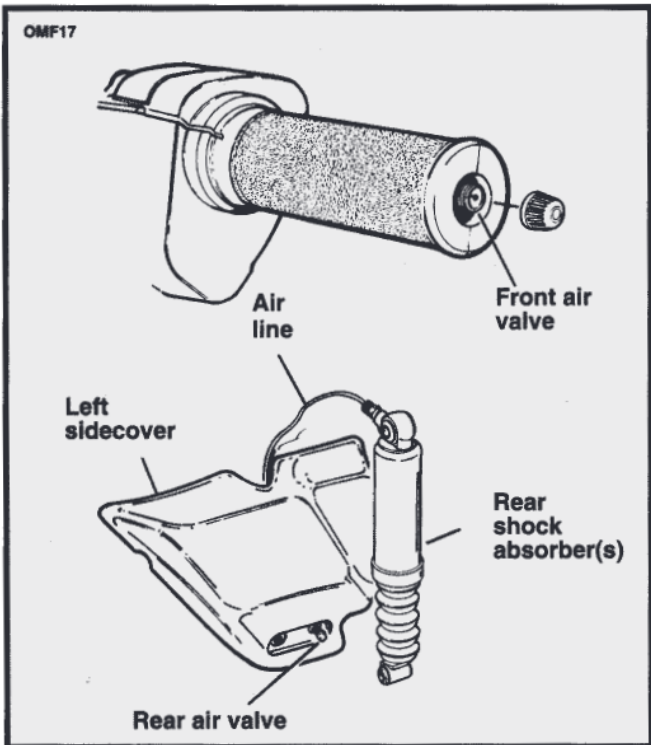


Figure 19. Air Suspension Components - FLT Models

Rear air suspension is adjusted by adding or removing air from the air valve located on the left sidecover below the passenger seat. See Table 4 for the recommended air pressure.

Table 4. FLT Air Suspension Pressure

Loading	RECOMMENDED PRESSURES (PSI)	
	Shocks	Forks
Rider weight - up to 150 lbs., add:	0	15
For each extra 25 lbs., add:	1.5	-
Passenger weight - for each 50 lbs., add:	1.5	-
Luggage weight - for each 10 lbs., add:	-	1
Maximum Pressures	35	25

**CAUTION**

Maximum air pressure for rear suspension is 35 psi. Air components fill rapidly. To avoid possible damage to components, use low air line pressure. Pressure in front forks and air shocks should be checked weekly if in daily use or before each trip if used occasionally.

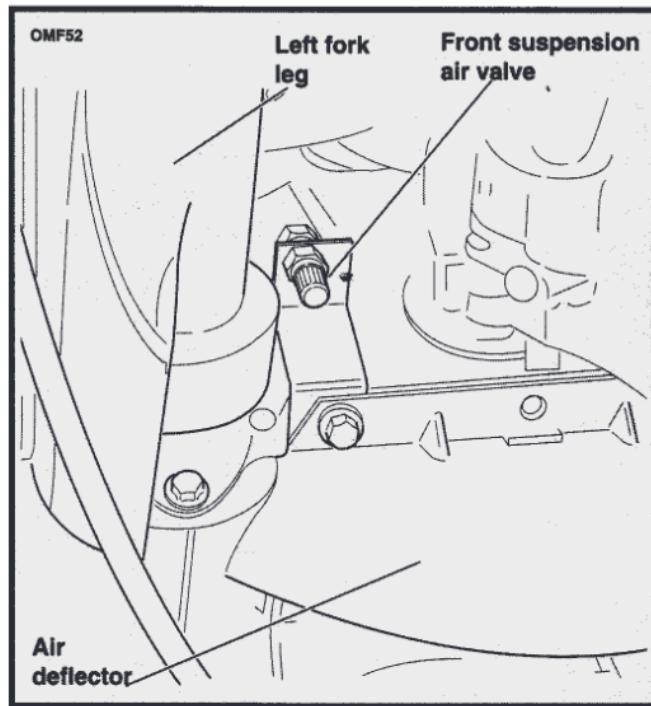
See Figure 19. On all FLT models, except the Road King, the front suspension air pressure is adjusted by adding or removing air from the air valve located at the left end of the handlebars. Refer to Table 4 for the recommended air pressure.

See Figure 20. The Road King's front suspension air pressure is adjusted by an air valve located under the headlamp shroud, on the left side of the motorcycle.

The preferred pressure for your personal riding comfort can be selected from Table 4. Lower pressure gives a softer ride and higher pressure gives a firmer ride. Setting the pressure outside the recommended range for your loading will result in a reduction of available suspension travel and reduced ride comfort. Pressures should be adjusted with the vehicle on the jiffy stand.

**⚠WARNING**

- **Maximum air pressure should not be exceeded. All air components fill rapidly and we recommend low air line pressure be used to avoid damage to the components.**
- **Use a no-loss air gauge to check air pressure. A small hand pump is the best way to add air to suspension components.**



**Figure 20. Front Air Suspension - Road King**

## PROCEDURE B - REAR SHOCK ABSORBER SPRING ADJUSTMENT

### Softail Models

See Figure 21. The rear shock absorber springs can be adjusted for the weight the motorcycle is to carry. The shock absorbers' springs are variable over a wide range. A spanner wrench for this purpose is available from your Harley-Davidson dealer.

To change the spring compression:

1. Loosen the locknuts.
2. Use the spanner wrench and extend or compress the springs to the desired position.

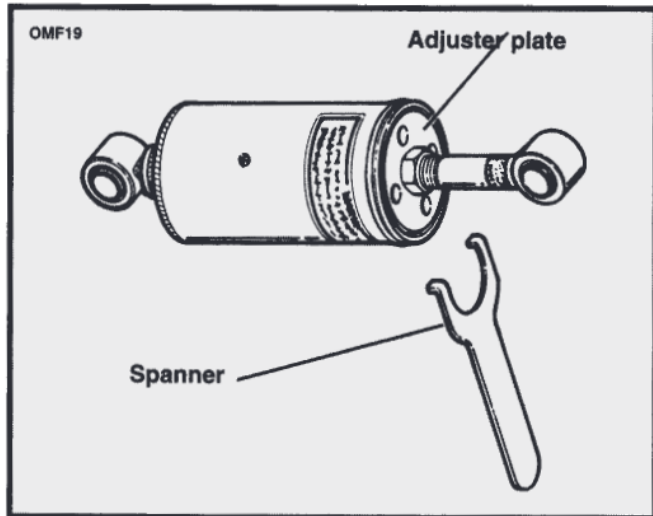
#### NOTE

- *Turning the adjuster plates OUT (toward the locknut) increases the spring preload to carry a heavier load. Turning the adjuster plates IN (away from the locknut) decreases the spring preload to carry a lighter load.*
  - *Mark the adjuster plates so you adjust both springs to the same position.*
3. Tighten the locknuts against the adjuster plates.



**WARNING**

**Both shock absorber adjuster plates must be adjusted to**



**Figure 21. Shock Adjustment - Softail Models**

**the same position. Not having the springs adjusted to the same length could cause handling difficulties.**

The average weight solo rider might use the extended (fully IN) spring position. A heavy solo rider might require the position with springs slightly compressed; a rider and passenger may require the compressed spring position (fully OUT).

Experimentation will show you what the best spring positions are for you.

## PROCEDURE C - REAR SHOCK ABSORBER SPRING ADJUSTMENT FXD/L/WG/CON, XLH Models

See Figure 22. The rear shock absorber spring preload can be adjusted for the weight the motorcycle is to carry. Hugger and Dyna Glide model shock absorbers have five preload positions. XLH models, except Hugger, have three preload positions. The average weight solo rider might use the extended spring preload position (off cam or first cam step). A heavy solo rider might require additional preload (second or middle cam step); a rider and passenger may require maximum preload (fifth/third cam step).

### **WARNING**

**Both shock absorber spring adjusting cams must be adjusted to the same position. Not having the cams adjusted to the same position could cause handling difficulties.**

To adjust the rear shock absorber springs, turn spring adjusting cam to the desired position with a spanner wrench.

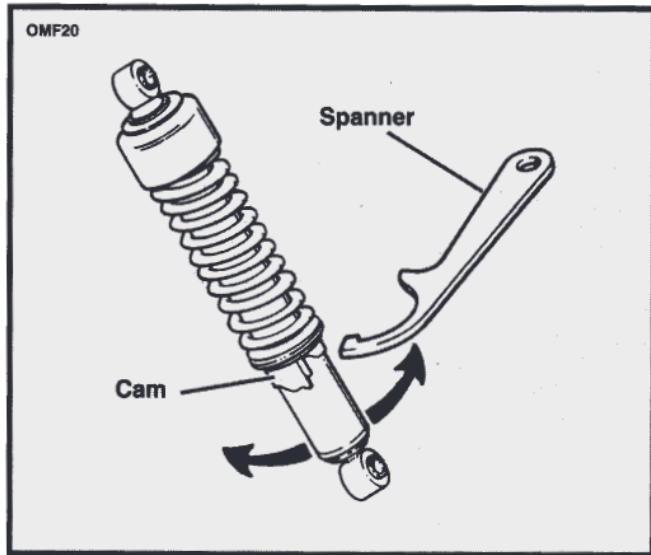


Figure 22. Shock Adjustment XLH, FXD/L/WG/CON

When returning to off-cam position, cams should be backed off in opposite direction. A spanner wrench for this purpose is available from your Harley-Davidson dealer.

## LUGGAGE

### FLT Models

#### WARNING

Keep cargo weight concentrated close to the motorcycle and as low as possible to minimize the change in the motorcycle's center of gravity. Distribute weight evenly on both sides of the vehicle and do not load bulky items too far behind the rider or add weight to the handlebars or front forks. Do not exceed 15 pounds maximum load in each saddlebag or 25 pounds maximum in Tour-Pak. Improper loading can cause vehicle handling problems, leading to personal injury.

### Tour-Pak Removal (Figures 23 and 24)

1. Unlock lock and open drawcatch.

#### CAUTION

Do not pull on the wires. Pulling on the wires may break them.

2. Unplug the wiring harness leading from the Tour-Pak to the motorcycle. Grasp both ends of the molded connector and pull apart.
3. Open Tour-Pak and remove Tour-Pak mat or liner,

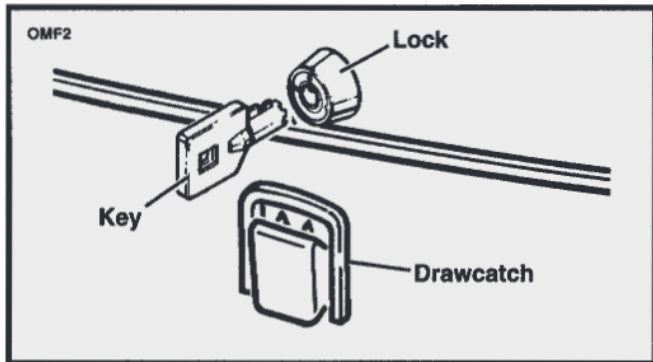


Figure 23. Tour-Pak Lock and Drawcatch exposing bolt heads.

4. Remove the map pouch by removing the nuts holding it in place.
5. Disconnect the antenna(e) and remove the speakers, if equipped.
6. Remove bolts and washers with wrench at inside of Tour-Pak. Remove Tour-Pak from luggage rack.

#### WARNING

The Tour-Pak supports the passenger backrest. Check

the Tour-Pak mounting bolts periodically for tightness. Be sure that they are in good condition and tightened properly when installing the Tour-Pak.

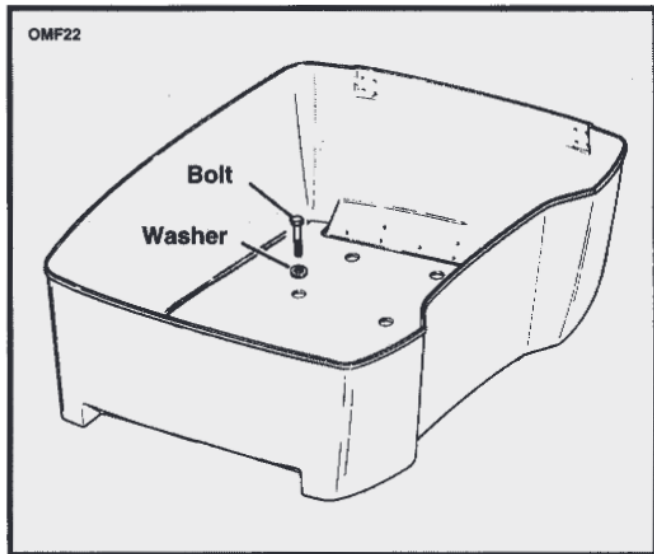


Figure 24. Tour-Pak Installation - FLT

#### NOTE

The Tour-Pak can be moved forward or back by selecting different bolt holes in the bottom of the Tour-Pak body. This allows you to adjust the passenger backrest forwards or backwards approximately 1 1/4 inches. The motorcycle is shipped with the Tour-Pak in the forward position.

#### NOTE

- When installing King Tour-Pak, be sure to connect lights, antennae and/or speakers at the connectors.
- Tour-Pak drawcatches should be closed and locked whenever motorcycle is in operation.

### FLT Models Saddlebag Operation (Figure 25)

#### NOTE

The FLT models' saddlebag lids are designed to stay attached to the bags at all times.

#### OPEN

1. Unlock latch.
2. Place fingers under latch and lift.
3. Place one hand at OUTSIDE CORNER of cover and other hand at opposite outside corner.

4. Lift outside edge of cover, pivoting inside edge of cover in brackets.
5. Lift inside edge of cover to disengage brackets.
6. Bring cover towards you, over saddlebag.
7. As you bring cover toward you, let it flip over, so the inside faces up. Let cover rest against rub bars and nylon check strap.

### **CLOSE**

1. Use both hands to hold **OUTSIDE** corners of cover up and slide inside edge back into place so brackets slide together.
2. Close lid and secure latch. Brackets will engage automatically.

#### *NOTE*

*Saddlebag latch and Tour-Pak drawcatches should be closed and locked whenever motorcycle is in operation.*

### **REMOVE (Figure 25)**

The saddlebags are secured to the support brackets by 1/4 turn fasteners called "Bail Head Studs".

#### *NOTE*

*If your vehicles does not have the wire form "bail", use a flat bladed screwdriver to turn the studs.*

1. Unscrew saddlebag fasteners by turning 1/4 turn

counterclockwise.

2. Remove saddlebag.

### **INSTALL (Figure 25)**

1. Carefully place saddlebag in position on saddlebag rail and align the bail head studs with the support bracket fasteners.
2. Fasten studs by pushing into support bracket fasteners and turning 1/4 turn clockwise. Be sure studs are securely fastened.

### **ADJUSTMENTS**

See Figures 25 and 50. If the latches become loose, you can adjust the latch "fingers". See **ACCESSORIES MAINTENANCE, HINGES, LATCHES, FUEL DOOR, SADDLEBAGS - FLT MODELS.**



**Adjust the latch "fingers" only enough to enable them to properly engage the latch hinge. Bending them back and forth can overstress the metal and weaken them.**

Bend the fingers until they firmly engage the hinge.



OMF23

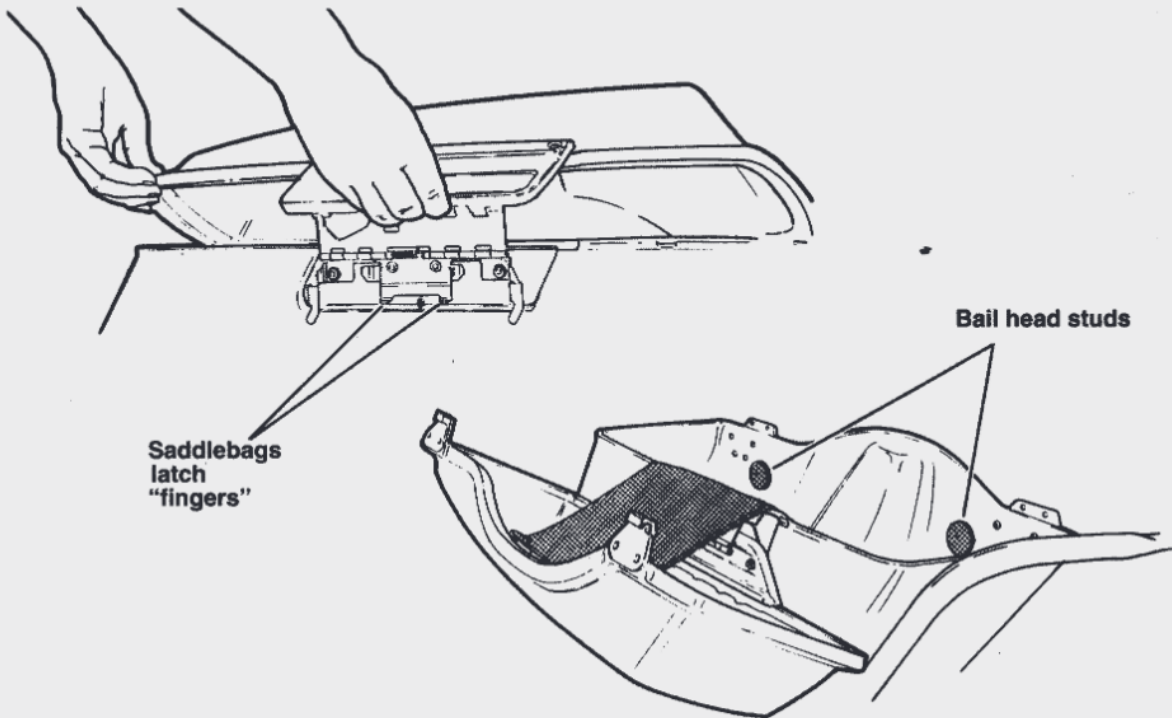


Figure 25. FLT Models Saddlebags

## FLHR WINDSHIELD REMOVAL

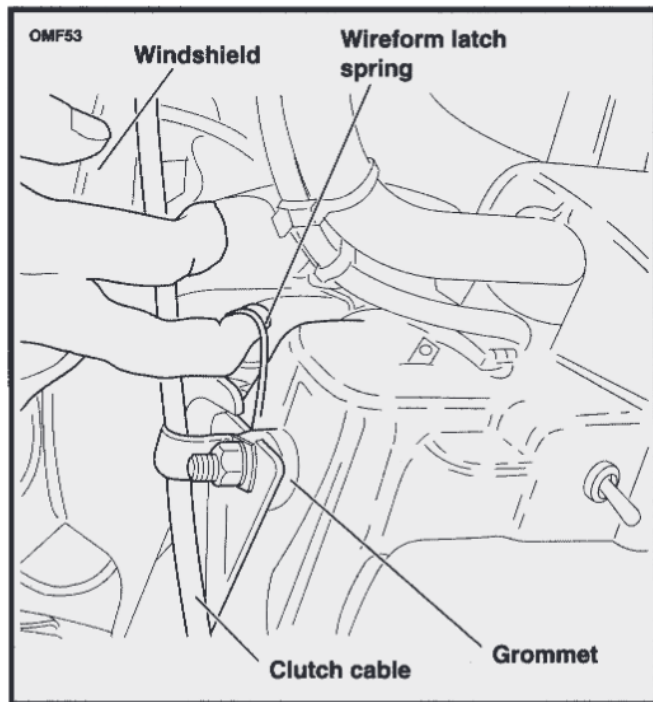
1. See Figure 26. Insert your fingers into the wireform latch springs at either side of the windshield and move the TOP of the windshield assembly forward, until the TOP bracket notches slide away from the grommets.
2. Carefully lift the windshield bracket BOTTOM notches off the bottom grommets. Remove windshield.

## INSTALLATION

### CAUTION

**Be sure you position the windshield bracket between the rubber grommets.**

1. See Figure 26. Insert your fingers into the wireform latch springs at either side of the windshield and slide the BOTTOM windshield bracket notches onto the bottom grommets.
2. Slide the TOP bracket notches onto the top grommets.



**Figure 26. Road King Windshield**

## FXDS-CON SADDLEBAG REMOVAL/ INSTALLATION

### WARNING

Keep cargo weight concentrated close to the motorcycle and as low as possible to minimize the change in the motorcycle's center of gravity. Distribute weight evenly on both sides of the vehicle. Do not exceed 12 pounds maximum load in each saddlebag. Improper loading can cause vehicle handling problems, leading to personal injury.

### CAUTION

**Be sure saddlebag frame(s) is fully seated on mounting studs and knobbed screw(s) is securely tightened.**

See Figure 27. The saddlebags are fastened to the bike at three points each by an integral frame. At the rear of each frame is a screw with a large knob and at the top of each frame are two slots that slide onto mounting studs on the fender brace. The saddlebags have handles for carrying.

## REMOVAL

1. Use the handle to support the saddlebag and unscrew

the knobbed screw from the rear fender.

2. Lift the bag up and slightly forward, so the slotted frame slides off the mounting studs.

### NOTE

*The knobbed screws are designed to stay in place on the saddlebag frame.*

## INSTALLATION

1. Put the saddlebag in position at the top support points.
2. Slide the slots in the frame onto the mounting studs.
3. Screw the knobbed screw into the screw hole in the fender until it is snug.

### WARNING

**The saddlebag handles are not intended to serve as "grab handles" for the passenger. DO NOT allow them to be used as "grab handles".**

For proper saddlebag maintenance, See ACCESSORIES MAINTENANCE.

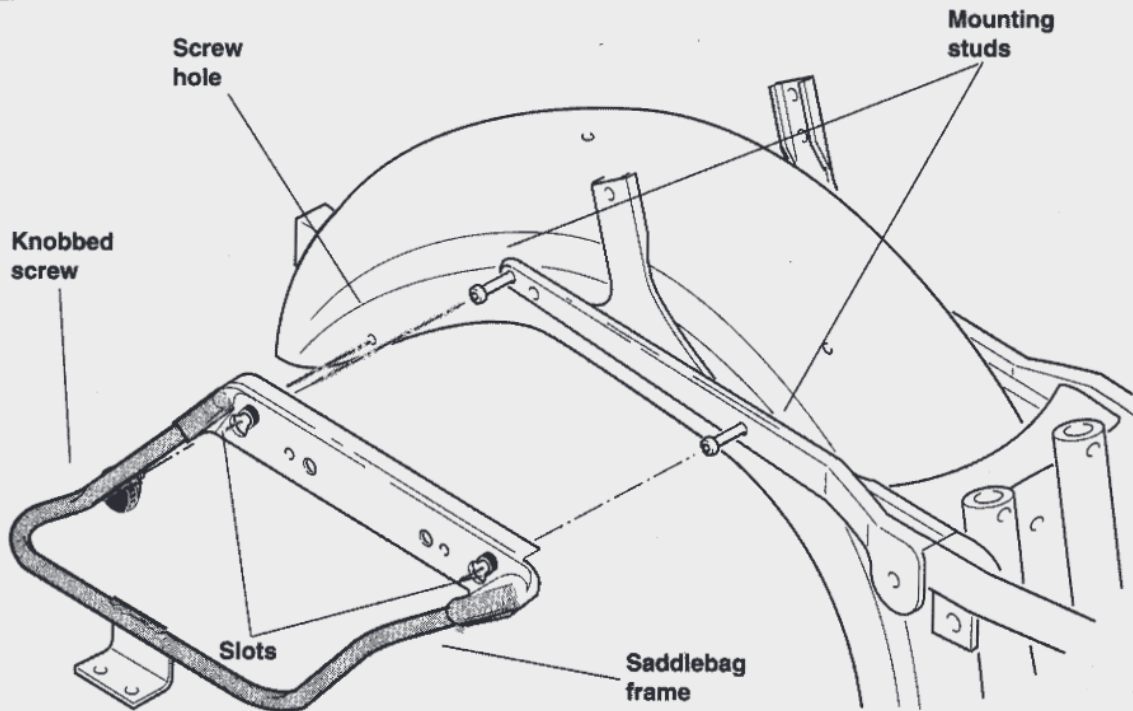


Figure 27. FXDS Convertible Saddlebag Frame Attachment (Saddlebag Removed For Illustration Purposes)

## FXDS-CON WINDSHIELD REMOVAL/ INSTALLATION

### CAUTION

When removing or installing the windshield, protect the headlamp housing and bracket and front turn signals with rags to prevent scratches.

### NOTE

*The socket head bolts (1) on the windshield brackets (2) permit minor windshield adjustments.*

## REMOVAL

See Figure 28. The windshield brackets have a hinge and toggle design for quick removal.

1. Loosen the toggles' socket head (toggle) bolts (3) enough to easily slip the toggle stops (4) out of their notches. Use the allen wrench provided.
2. Carefully support the windshield and unhinge the hinges (5) from the slider tubes. The toggle stops and bolts remain with the hinges.
3. Remove windshield assembly from the motorcycle.

## INSTALLATION

### NOTE

*With practice, you will be able to install the windshield with the hinges in place. However, initially you may find it easier to install by removing the left side hinge assemblies from the bracket (2), then installing them once the right side hinges are in place.*

1. Place the windshield on the motorcycle's front fork and move the hinges (5) into position on the slider tube.

### CAUTION

- **Be sure that the lower part of the windshield is positioned BEHIND the front turn signals.**
  - **Do not bend or damage front brake line.**
2. Close the hinges on the slider tubes.

### NOTE

*The hinges will not close properly if you close them around a wiring harness or the clutch cable. Be sure they are closing only on the slider tubes.*

3. Slide the toggle stops (4) into their notches in the hinges, with the lip facing outward. As each hinge is fastened, tighten the toggle bolts (3) finger tight, to hold the windshield in position.

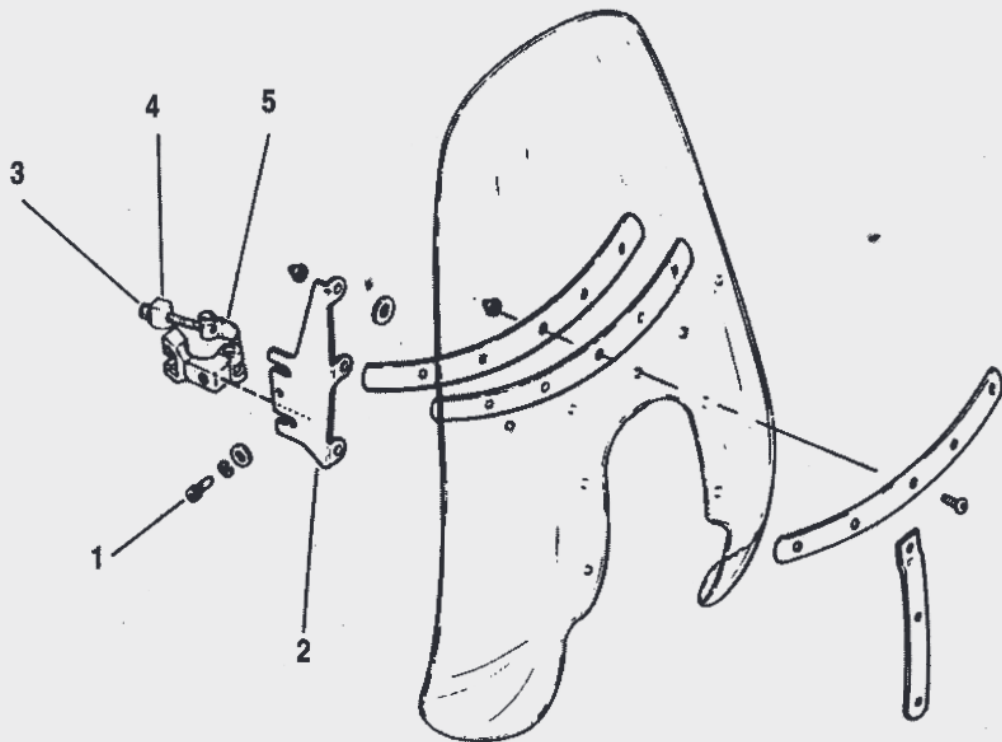


Figure 28. FXDS-CON Windshield

4. Check the position of the windshield. Carefully position the windshield so no part of the windshield touches any part of the motorcycle.

 **CAUTION**

**Tighten the toggle bolts with the supplied "key-ring" allen wrench. DO NOT use a long handled allen wrench or over-tighten. Over-tightening could cause the toggle**

**bolts to work loose. The hinges are designed to produce their maximum clamp load when the toggle bolts are snug.**

5. Tighten the toggle bolts and socket head bolts.
6. For proper windshield maintenance, See ACCESSORIES MAINTENANCE in the MAINTENANCE Section.

## OPERATING RECOMMENDATIONS

### CAUTION

Do not run the engine at extremely high RPM with clutch disengaged or transmission in neutral. Do not exceed maximum safe RPM specified in Table 5 under any conditions.

### CAUTION

Do not exceed maximum recommended safe engine speed. Do not idle the engine unnecessarily for more than a few minutes with motorcycle standing still.

**Table 5. Maximum Recommended RPM**

MODEL	MAXIMUM RECOMMENDED ENGINE SPEED (RPM)
XLH Models	5800
All Other Models	5000

### NOTE

- The 1340cc ignition module has an ignition retard feature which will automatically begin to retard the spark advance to  $0^\circ$  if the engine exceeds 5000 RPM.
- The XLH ignition module has an ignition retard feature

*which will automatically begin to retard the spark advance to  $0^\circ$  if the engine exceeds 6000 RPM.*

An engine run long distances at high speed must be given closer than ordinary attention to avoid overheating and possible damage. Have the engine checked regularly and keep it well tuned. This applies particularly to a motorcycle equipped with windshield, fairing and lowers.

### WARNING

When riding on wet roads or under rainy conditions, braking efficiency is greatly reduced. Caution must be used when applying the brakes, accelerating and turning. This is especially true immediately after the rain begins and the oil from the road surface combines with the water.

When descending a long, steep grade, downshift and use engine compression together with intermittent application of both brakes to slow the motorcycle. Avoid continuous use of the brakes which may overheat them and cause reduced braking efficiency.

Do not coast for a long distance with the engine off because the transmission is properly lubricated only when the engine is running. To prevent transmission damage, do not tow the motorcycle.



## BREAK-IN - THE FIRST 500 MILES

The sound design, quality materials, and workmanship that is built into your new Harley-Davidson will give you optimum performance right from the start.

However, for the first 500 miles, to wear-in critical parts, observe the few simple riding rules below. This will assure future performance and durability.

1. During the first 50 miles, keep the engine speed below 2500 RPM in any gear, however, do not lug the engine.
2. Up to 500 miles, vary the engine speed, avoiding any steady speed for long distances. Engine speed up to 3000 RPM is permissible in any gear.
3. Avoid fast starts at wide open throttle. Drive slowly until engine warms up.
4. Avoid running the engine at extremely low RPM in higher gears.  
DO NOT exceed 50 mph for the first 50 miles.  
DO NOT exceed 55 mph for the first 50 - 500 miles.

See Table 6. On vehicles without tachometers, shift as follows:

**Table 6. Gear Changes - Models Without Tachometers**

GEAR CHANGE	SPEED
<b>Acceleration (Upshift)</b>	
First to Second	15 mph (25 km/h)
Second to Third	25 mph (40 km/h)
Third to Fourth	40 mph (65 km/h)
Fourth to Fifth	50 mph (80 km/h)
<b>Deceleration (Downshift)</b>	
Fifth to Fourth	40 mph (65 km/h)
Fourth to Third	30 mph (50 km/h)
Third to Second	20 mph (30 km/h)
Second to First	10 mph (15 km/h)

## PRE-RIDING CHECKLIST



**Read CONTROLS AND INDICATORS section before riding your motorcycle.**

Before riding your motorcycle at any time, make a general inspection to be sure it is in safe riding condition.

1. Check amount of fuel in tank and add fuel if required.

## WARNING

Remove fuel filler cap slowly. Fill fuel tank slowly to prevent fuel spillage. Do not fill above the bottom of filler neck insert. Leave air space to allow for fuel expansion. Expansion can cause an overfilled tank to overflow fuel through the filler cap vent to surrounding areas. After refueling, be sure filler cap is securely tightened.

## CAUTION

Gasohol spills can stain the paint on your Harley-Davidson.

2. Check oil tank oil level. See MAINTENANCE AND LUBRICATION section.
3. Check controls to be sure they are operating properly; operate the front and rear brakes, throttle, clutch and shifter.
4. Check steering for smoothness by turning the handlebars through the full operating range.
5. Check tire condition and pressure. Incorrect pressure will result in poor riding characteristics and can affect handling and stability. See TIRE DATA, for correct inflation pressures to use.

6. Check all electrical equipment and switches including the stoplamp, turn signals and horn for proper operation.
7. Check for any fuel, oil or hydraulic fluid leaks.
8. Check rear belt adjustment. Service as necessary.

## STARTING THE ENGINE GENERAL

### WARNING

Before starting engine, always shift transmission to neutral to prevent accidental movement which could possibly cause damage to motorcycle and/or personal injury.

### CAUTION

Never accelerate the engine above 2500 RPM immediately after a cold start. The engine should be allowed to run slowly for 15-30 seconds. This will allow the engine to warm up and let oil reach all surfaces needing lubrication. Extended idling with enrichener in the full out position for a period longer than 30 seconds is not recommended.

## NOTE

*Engine stop switch on the right handlebar control group must be in RUN (ignition on) position to start engine.*

Use recommended oil for extended expected temperatures. See engine lubrication table in the MAINTENANCE AND LUBRICATION section.

If you read this section and still have questions about the correct operation of your motorcycle, talk to your authorized Harley-Davidson dealer.

## CARBURETED MODELS

### NOTE

- *H-D CV carburetors have an enricher circuit that will cause the engine to idle at approximately 2000 rpm with the engine at normal operating temperature and the enricher knob pulled fully out.*
- *The increase in idle speed is intended to alert the rider that the engine is warmed up to normal operating temperature and the enricher knob should be pushed all the way in.*
- *Continuing to use the enricher when the engine is at full operating temperature WILL CAUSE FOULED SPARK PLUGS.*

## CAUTION

**You must pay close attention to the vehicle's warm-up time. Either excessive or insufficient use of the enricher may cause poor performance, erratic idle, poor fuel economy and spark plug fouling.**

### NOTE

*The following starting and operating instructions for all Harley-Davidson motorcycles are recommendations. They may be modified for individual vehicles.*

### COOL ENGINE

#### Outside Temperature Cooler than 50°F

**BE SURE THROTTLE IS CLOSED.** Pull enricher knob to full out position. Turn the ignition switch on and press starter switch to operate the electric starter.

1. See Figure 3. After initial 15-30 second warm-up, ride for 5 minutes or 3 miles with enricher knob in full out position.
2. After 5 minutes or 3 miles, push the enricher knob in to the 1/2 way position. Ride 2 minutes or 2 miles.
3. After 2 minutes or 2 miles, push the enricher knob fully in.

### NOTE

*If outside temperature is cooler than 20°F it may be necessary to pump the throttle 2 or 3 times.*

## COOL ENGINE

### Outside Temperature Warmer than 50°F

BE SURE THROTTLE IS CLOSED. Pull enrichener knob to full out position. Turn the ignition switch on and press starter switch to operate the electric starter.

1. See Figure 3. After initial 15-30 second warm-up, ride for 3 minutes or 2 miles with enrichener knob in full out position.
2. After 3 minutes or 2 miles, push the enrichener knob in to the 1/2 way position. Ride 2 minutes or 2 miles.
3. After 2 minutes or 2 miles, push the enrichener knob fully in.

## WARM OR HOT ENGINE

Open throttle 1/8 - 1/4. Turn on ignition switch and operate electric starter. DO NOT USE ENRICHENER.

### NOTE

*If the engine does not start after a few turns or if one cylinder fires weakly but engine does not start, it is usually because of an over-rich (flooded) condition. This is especially true of a hot engine. If the engine is flooded, push enrichener knob in all the way, turn ignition on and operate starter with throttle wide open. DO NOT "pump" the throttle while turning over the engine.*

## SEQUENTIAL PORT FUEL INJECTED HARLEY-DAVIDSONS

### General

There are some differences between a carbureted Harley-Davidson and a fuel injected Harley-Davidson. The sequential port fuel injection system simplifies the starting procedure, compared to carbureted Harley-Davidsons.

Do not "pump" the throttle before starting. Rolling the throttle before starting the motorcycle is unnecessary.

There is no "choke" or "enrichener" on a fuel-injected Harley-Davidson. The engine management system handles starting and running the engine at all temperatures and conditions.

There is no fuel valve.

If the sound system is not on, you may occasionally hear a slight fuel pump purr, as the fuel pump operates to maintain the proper pressure in the fuel lines.

### Starting

1. Turn ignition on. Do not "pump" the throttle.

#### NOTE

*The engine lamp will light for approximately 4 seconds and you will hear the fuel pump purr for approximately 2 seconds as it operates to fill the fuel lines with gasoline.*

2. Press the starter button to start the motorcycle.
3. When the engine has started, you can operate your motorcycle as you normally would.

#### NOTE

*If the fuel tank becomes completely dry, it may take a few seconds longer to start the motorcycle after filling the tank. It will not be necessary to take any extraordinary measures before starting the motorcycle.*

## STOPPING THE ENGINE

See Figure 2. Stop the engine by turning off the engine stop switch (10) on right handlebar, then turn off the ignition key switch. If the engine should be stalled or stopped in any way, turn off the key switch at once to prevent battery discharge.

## SHIFTING GEARS



**The clutch must be fully disengaged before attempting a gear shift.**

#### NOTE

*Always start motorcycle in motion in first gear.*

See Figure 2. To start moving with motorcycle upright and engine idling, pull the clutch lever (6) to fully disengage clutch. See Figure 29. Push shifter lever down firmly, but gently, to end of its travel to engage first gear. Then release the clutch lever slowly to engage the clutch and at the same time, open throttle gradually.

Engage second gear after the motorcycle has run a few yards, as follows: Close the throttle, disengage the clutch, lift the gear shifter pedal up to the end of its travel and release. Engage the clutch and operate the throttle gradually. Repeat the same operation to engage third, fourth, and fifth gears.

To shift to lower gears, reverse the movement of the gear shifter lever, disengage the clutch completely before each gear change and only partially close the throttle so the engine will not drag when clutch is again engaged.

Keep in mind that by lifting the gear shifter lever up, a higher gear is engaged; by pushing the gear shifter lever down a lower gear is engaged. When stopping, operate gear shift until you reach neutral. Neutral is 1/2 stroke up from first gear on 1340cc models. On XLH models, neutral is 1/2 stroke up from first gear and 1/2 stroke down from second gear.

See Figures 4, 29 and Table 7. Gear shift pattern is first gear down; next four gears up.

 **WARNING**

**When shifting to lower gears with the motorcycle in motion, do not downshift at speeds higher than those listed in the table. Shifting to lower gears when speed is too high may severely damage the transmission or cause the rear wheel to lose traction.**

 **CAUTION**

**Do not shift gears without fully disengaging the clutch.**

Shift to neutral before stopping engine. Shifting mechanism can be damaged by shifting gears while engine is stopped.

*NOTE*

*Always start motorcycle in motion in first gear.*

When engine speed decreases, as in climbing a hill or running at a reduced speed, shift to the next lower gear while partially closing the throttle so the engine accelerates as soon as the clutch lever is pulled.

See Gear Shifter in the CONTROLS AND INDICATORS section. The recommended shift points are as follows:

**Table 7. Gear Change Speeds**

<b>GEAR CHANGE</b>	<b>SPEED</b>
<b>Acceleration (Upshift)</b>	
First to Second	15 mph (25 km/h)
Second to Third	25 mph (40 km/h)
Third to Fourth	40 mph (65 km/h)
Fourth to Fifth	50 mph (80 km/h)
<b>Deceleration (Downshift)</b>	
Fifth to Fourth	40 mph (65 km/h)
Fourth to Third	30 mph (50 km/h)
Third to Second	20 mph (30 km/h)
Second to First	10 mph (15 km/h)

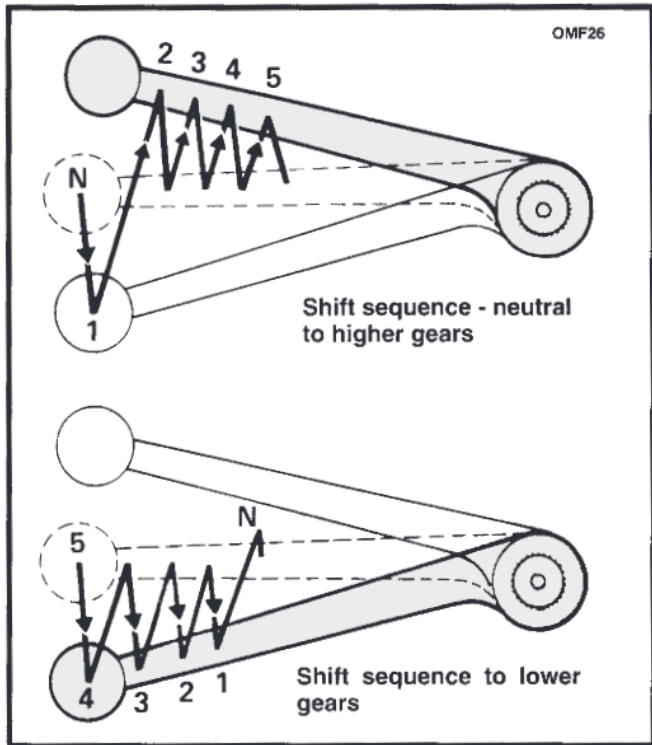


Figure 29. 5 - Speed Shifting Sequence

**NOTE**

- *The gear shifter mechanism on 1340cc 5-speed motorcycles does not permit shifting the transmission to neutral from second gear. Neutral can only be engaged from first gear.*
- *The XLH 5-speed transmission can be shifted to neutral from either first or second gear.*

## SAFE OPERATING MAINTENANCE

Good maintenance means a safe machine. A careful check of certain equipment must be made after periods of storage and frequently between the regular service intervals to determine if additional maintenance is necessary.

The following items should be checked:

1. Tires for correct pressure, abrasions or cuts.
2. Belt and primary chain for proper tension.
3. Brakes, steering and throttle for responsiveness.
4. Brake fluid level and condition. Hydraulic lines and fittings for leaks. Also, check brake pads and discs for wear.
5. Cables for fraying or crimping and free operation.
6. Engine oil, primary chaincase and transmission fluid levels.
7. Wheel spoke tightness, if applicable.
8. Headlamp, taillamp, brake lamp and directional lamp operation.

### WARNING

**For your personal welfare, all the listed service and maintenance recommendations should be performed. Lack of regular maintenance, at the suggested intervals, may affect the safe operation of your motorcycle.**

## BREAK-IN MAINTENANCE

### NOTE

*The performance of new motorcycle initial service is required to keep your new motorcycle warranty in force, and to assure proper emissions system operation.*

After a new motorcycle has been ridden its first 500 miles the motorcycle should be taken to the dealer from whom it was purchased for initial service operations with which the dealer is familiar. If it is impossible to take the motorcycle to a dealer at the mileage intervals mentioned, the owner should at least give the following outlined attention, or arrange to have it given, and take the motorcycle to the dealer for more complete servicing as soon as it is convenient.

We recommend the following maintenance procedures be performed by your Harley-Davidson dealer.

### WARNING

- **Stop the engine and support the motorcycle securely before performing all service procedures. Service should be performed using proper tools, in an adequately lighted and ventilated work area.**
- **When working on the motorcycle, do not support motorcycle by placing supports under the brake pedal. Damage to the brake system could occur causing possible malfunction and personal injury**



## WARNING

For your personal welfare, all the listed service and maintenance recommendations should be followed because they may affect the safe operation of your motorcycle.

## CHECK AT FIRST 500 MILES

### NOTE

*The following is an overview. For a complete listing, see the 500 mile checklist (coupon) at rear of manual.*

1. Change engine oil.
2. Replace oil filter.
3. Change primary chaincase lubricant and clean magnetic drain plug. See Dealer.
4. Inspect air cleaner and service as required.
5. Check/adjust primary chain. See Dealer.
6. Check clutch adjustment. See Dealer.
7. Check rear brake pedal height adjustment. See Dealer.
8. Inspect brake pad linings and discs for wear.
9. Check brake fluid level and condition. See Dealer.
10. Inspect oil lines and brake system for leaks.

## CAUTION

**DO NOT lubricate the enrichener cable on C.V. carburetors.**

11. Lubricate the following: front brake hand lever, throttle control cables, clutch control cable (and hand lever\*).
12. Check operation of throttle and enrichener controls.
13. Check engine idle speed.
14. Check battery electrolyte level; check and clean connections.
15. Check operation of all electrical equipment and switches.
16. Check cruise control disengage switch and other components.\*
17. Check tightness of all fasteners, except engine head bolts.
18. Check stabilizer links\* and engine mounts. See Service Manual.
19. Check tire pressure and inspect tread.
20. Check wheel spoke tightness.\* See Dealer.

\* If applicable.

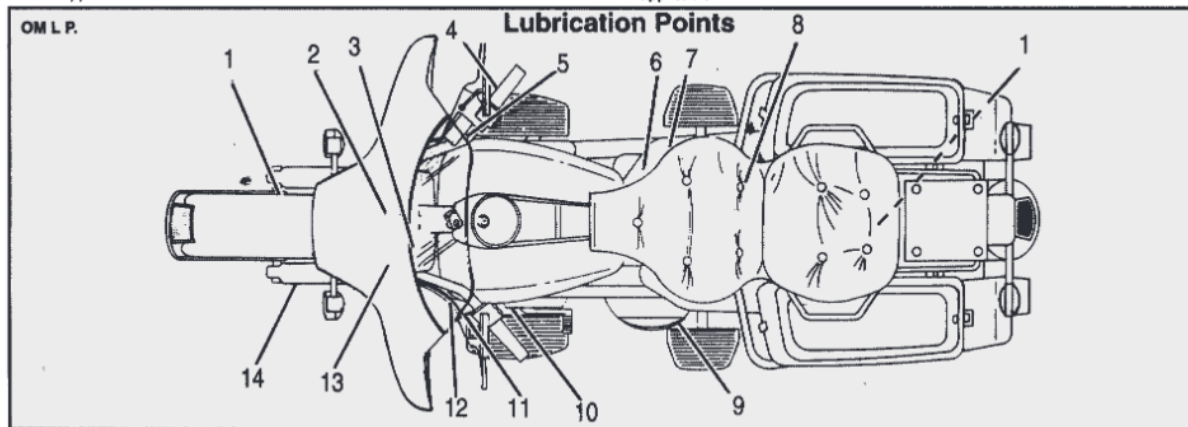
21. Check rear fork pivot nut tightness.\* See Dealer.
  22. Check/adjust rear drive belt.
  23. Change transmission lubricant and clean magnetic drain plug.
  24. Inspect fuel valve, lines and fittings for leaks.
  25. Check rear shock absorbers.
  26. Check front fork bearing adjustment. See Dealer.
  27. Check and adjust air suspension system.\*
  28. Road test.
- \* If applicable.

## LUBRICATION SUMMARY

Service Operation	P r e r i d e	5 0 0	5 0 0 0	1 0 0 0 0	Service Operation	P r e r i d e	5 0 0	5 0 0 0	1 0 0 0 0
	1. Wheel bearings					√	9. Primary chaincase lubricant		
2. Steering head bearings					10. Jiffy stand		√		
3. Speedometer cable*			√		11. Clutch control cable (and hand lever, if necessary)		√	√	
4. Throttle grip sleeve, throttle control cables, front brake hand lever		√	√		12. Shifter pivot fitting*		√	√	
5. Rear brake pedal grease fitting*		√	√		13. Oil filter		√	√	
6. Engine oil (pre-ride check)	√	√	√		14. Front fork oil*		√	√	
7. Transmission lubricant		√	√		* Hinges, latches - fuel door, Tour-Pak, saddlebags			√	
8. Rear fork bearings*				√					√

\* If applicable

\* If applicable



## REGULAR SERVICE INTERVALS

Regular lubrication and maintenance will help keep your new Harley-Davidson operating at peak performance. Your Harley-Davidson dealer knows best how to service your motorcycle with factory approved methods and equipment assuring you of thorough and competent workmanship.

### NOTE

*Regular maintenance interval operations are required to keep your new motorcycle warranty in force. The use of other than Harley-Davidson approved parts and service procedures may void the warranty. Any alterations to the emission system components, such as the carburetor and exhaust system, may be in violation of Federal and State laws.*

### CAUTION

**Remember, the regular maintenance intervals given in this manual are intended to be guidelines.**

**If you operate your motorcycle under adverse conditions, (severe cold, extreme heat, very dusty environment, very bad roads, through standing water, etc.) you should perform the regular maintenance intervals more frequently to ensure the safe operation of your motorcycle.**

## REGULAR MAINTENANCE INTERVALS

ODOMETER READING SERVICE OPERATIONS (see chart code below)	P r i d e	5	2	5	7	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
		0	5	0	5	0	5	0	5	0	0	5	0	0	0	5	0	0	0	5	0	5
		mi	mi	mi	mi	mi	mi	mi	mi	mi	mi	mi	mi	mi	mi	mi	mi	mi	mi	mi	mi	mi
Engine oil*	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R
Oil Filter		R		R		R		R		R		R		R		R		R		R		R
Air Cleaner		I		I		I		I		I		I		I		I		I		I		I
Hydraulic lifter oil screen**		I		I		I		I		I		I		I		I		I		I		I
Rear belt	I	A		IA		IA		IA		IA		IA		IA		IA		IA		IA		IA
Primary chain		I		I		I		I		I		I		I		I		I		I		I
Clutch adjustment		A		A		A		A		A		A		A		A		A		A		A
Primary chaincase lubricant		R		R		R		R		R		R		R		R		R		R		R
Transmission lubricant		R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R
Brake fluid level and condition*		I		I		I		I		I		I		I		I		I		I		I
Rear brake pedal height adjustment		I		I		I		I		I		I		I		I		I		I		I
Brake pad linings and discs for wear		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Condition of rear brake calliper mounting pins & boots				IL		IL		IL		IL		IL		IL		IL		IL		IL		IL
Grease fittings (2), shift and brake lever pivots**, rear brake linkage**				IL		IL		IL		IL		IL		IL		IL		IL		IL		IL
Front brake hand lever, throttle control cables, clutch control cables (and hand lever**)		L		L		L		L		L		L		L		L		L		L		L
Throttle control grip sleeve, speedometer cable**			L		L		L		L		L		L		L		L		L		L	
Fuel valve, lines and fittings for leaks		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Fuel tank filter screen																						
Engine idle speed		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Operation of throttle and enrichener controls		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Battery fluid level, connections*		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I

<b>ODOMETER READING</b> <b>SERVICE OPERATIONS</b> (see chart code below)	P	5	2	5	7	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	
	ride	00	00	00	00	00	25	50	75	00	00	00	00	00	00	00	00	00	00	00	00	00	00
Spark plugs				I		R				R				R				R					R
Operation of all electrical equipment and switches	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Ignition timing and vacuum operated electric switch (V.O.E.S.)				I		I				I				I				I					I
Cruise control components**		I		I		I				I				I				I					I
Air suspension components**		I		I		I				I				I				I					I
Condition of rear shock absorbers		I		I		I				I				I				I					I
Rear fork pivot nut**	I	I		I		I				I				I				I					I
Rear fork bearings**				I		IL		IL		IL		IL		IL		IL		IL		IL		IL	
Front fork oil*, **						R				R				R				R					R
Front fork bearing adjustment		I		I		IL		I		IL		I		IL		I		IL		I		IL	
Wheel bearings*						IL				IL				IL				IL					IL
Wheel spoke tightness**		I		I		I				I				I				I					I
Springer rocker bearings**						A				A				A				A					A
Tire pressure and inspect tires for wear/damage	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Engine mounts**		I		I		I				I				I				I					I
Stabilizer links**		I		I		I				I				I				I					I
Vehicle alignment*				I		I				I				I				I					I
All fasteners except engine head bolts		T		T		T		T		T		T		T		T		T		T		T	
Hinges, latches - fuel door, Tour-Pak, saddlebags**				L		L		L		L		L		L		L		L		L		L	
Road King windshield bushings						I				I				I				I					I
Jiffy stand				L		L		L		L		L		L		L		L		L		L	
Road test		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

\*Also perform prior to storage, or annually.

\*\*If applicable.

Chart Code:

I - Inspect, & if necessary correct, clean or replace.

A - Adjust.

R - Replace or change.

T - Tighten to proper torque.

L - Lubricate with specified lubricant.

X - Perform.

## ENGINE LUBRICATION

Engine oil is a major factor in the performance and service life of the engine. Use the proper grade of oil for the lowest temperature expected before the next oil change as shown below. Your Harley-Davidson dealer has the proper grade oil to suit your requirements.

See Table 8. Use Harley-Davidson MULTI-GRADE OIL for normal and severe usage in air temperatures between 20°F and 100°F. For other conditions, or if MULTI-GRADE is not available, use oils as shown in table below. If it is necessary to add oil between oil changes and Harley-Davidson oil is not available, use the highest classification motor oil you can obtain.

**Table 8. Recommended Engine Oils**

Harley-Davidson Type	Viscosity	Harley-Davidson Rating	Ambient Temperature °F	Cold Weather Starts Below 50° F.
H.D. Multi-Grade	20W50	HD 240	Above 40 <sup>o</sup> to 100 <sup>o</sup>	Good
H.D. Multi-Grade	10W40	HD 240	Below 40 <sup>o</sup>	Excellent
H.D. Regular Heavy	50	HD 240	Above 60 <sup>o</sup> to 100 <sup>o</sup>	Poor
H.D. Extra Heavy	60	HD 240	Above 80 <sup>o</sup> to 100 <sup>o</sup>	Poor

## CHECKING OIL LEVEL (Figures 30, 31, 32 & 33, Table 9)

Engine oil level should be checked only when engine is at normal operating temperature. The engine will require a longer warm up period in colder weather. The motorcycle should be ridden to ensure oil is hot and is at normal operating oil pressure. When the above conditions are met, turn the engine off. See Table 9.

### NOTE

- *To remove all H-D dipstick/oil plugs, pull steadily on the plug while moving it back and forth.*
- *Sidecar-equipped vehicles should have oil level 1/2 in. higher on dipstick.*

All motorcycles except Softails and Sportster models should be on the sidestand. Softails and Sportster models should be upright and level. Wipe off dipstick and insert into tank with plug pushed completely into filler neck.



**Do not allow hot oil level to fall below lower mark on dipstick. Do not overfill oil tank. Overfilling may cause oil carryover to the air cleaner.**

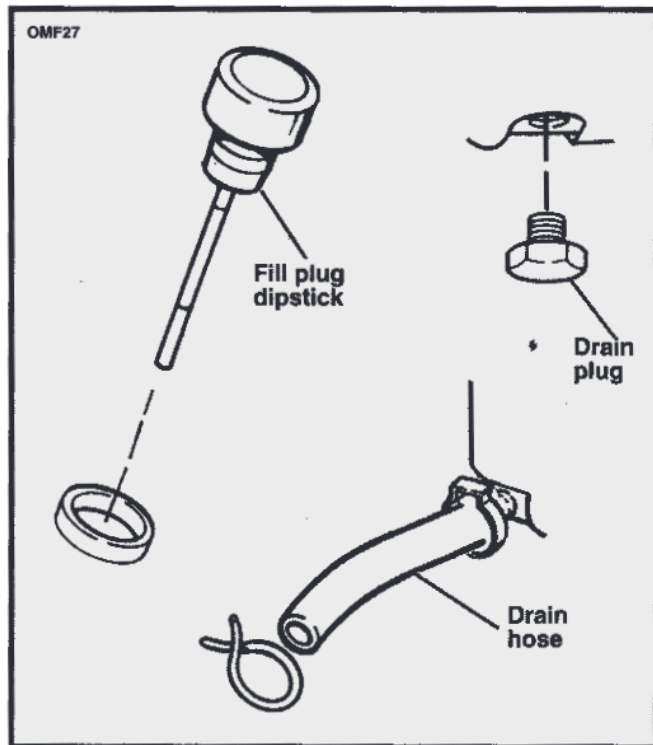


Figure 30. Fill Plug Dipstick & Oil Tank Drains

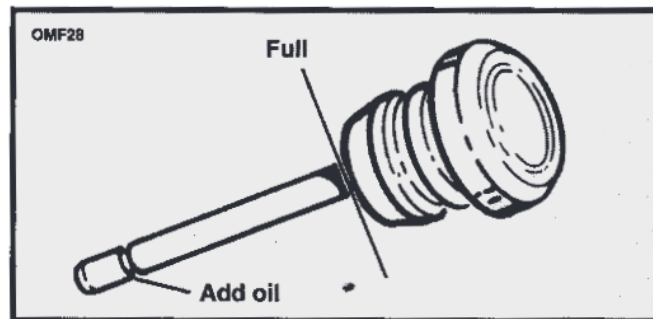


Figure 31. Engine Oil Level - Softail Models

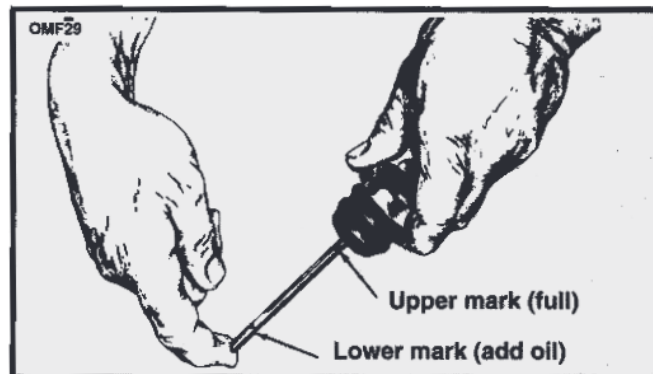
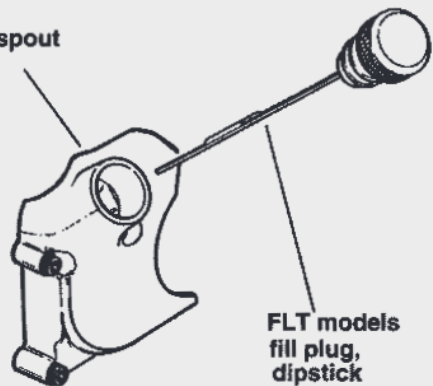
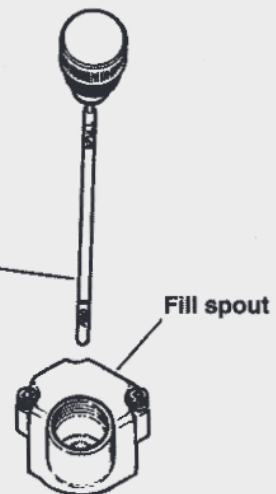


Figure 32. Engine Oil Level - XLH Models



Fill spout

FLT models  
fill plug,  
dipstickDyna Glide  
model fill  
plug, dipstick

Fill spout

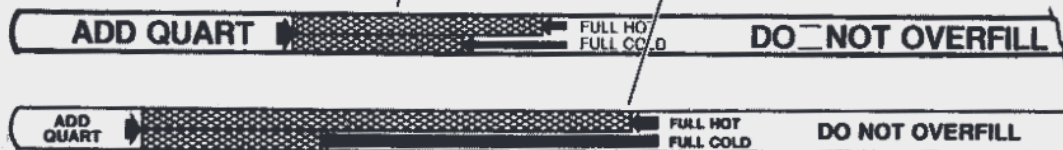


Figure 33. Dyna Glide, FLT Models Fill Plug, Dipstick, Fill Spout

Remove dipstick and note oil level. If oil level is down to or below lower "fill" mark on dipstick add only enough oil to bring level to upper mark on dipstick. See Figure 31. For Softail models, add only to bottom of dipstick plug.



**Do not switch brands indiscriminately because some oils interact chemically when mixed. Use of inferior oils or non-detergent oils can damage the engine.**

**Table 9. Checking Oil Level**

<b>MODEL</b>	<b>DRAIN</b>	<b>FILL</b>	<b>DIPSTICK</b>	<b>VEHICLE POSITION</b>
FLT Models	Drain plug at front of oil pan.	Plug on right side, top, rear of transmission case.	On fill plug.	Resting on jiffy stand.
Softail Models	Drain hose right side of oil tank.	Plug, right side of oil tank.	On fill plug.	Straight up and level.
XLH Models	Drain hose, rear of frame, under rear fork.	Plug, right side, below seat.	On fill plug.	Straight up and level.
Dyna Glide Models	Drain plug, under transmission, forward, left corner.	Plug, right side, top, front of transmission case.	On fill plug.	Resting on jiffy stand.

Check engine oil supply at each complete fuel refill. Oil should be changed after the first 500 miles for a new engine, and thereafter at 5000 mile intervals in normal service at warm or moderate temperatures. Oil change intervals should be shorter in cold weather - see WINTER LUBRICATION.

Completely drain oil tank of used oil and refill with fresh oil. If service is extremely hard or on dusty roads, drain and refill at shorter intervals. Draining should be done after a ride while oil is hot. It is not necessary to drain the crankcase because it does not accumulate used oil. The oil filter should be replaced every time the oil is changed.

## ENGINE OIL FILTER (Figure 34)

Oil filters are located on an oil filter mount in front of the engine.

Completely drain engine oil tank before removing oil filter. Clean filter gasket contact surface on mounting plate. Surface should be smooth and free of any debris or old gasket material. Apply a thin film of oil to gasket contact surface on mounting plate and to gasket on new oil filter.

### NOTE

*On XLH models pour four ounces of clean oil into filter.*

Screw filter onto adapter until gasket contacts plate surface. On all models except Dyna Glides, apply another 1/2 to 3/4

turn by hand. On Dyna Glide models, apply another 3/4 to 1 full turn.

### **⚠**WARNING

**Be sure no oil gets on rear tire when changing the filter. Traction will be adversely affected.**

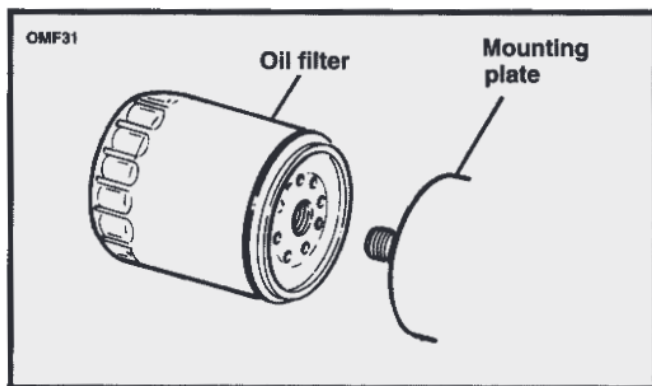


Figure 34. Engine Oil Filter

## Winter Lubrication

Combustion in any engine produces water vapor. When starting and warming up in cold weather, much of the vapor condenses to water on the relatively cool metal surfaces. If the engine is driven enough to get the crankcase thoroughly

warmed up frequently, most of this water is again vaporized and blown out through the breather.

A moderately driven engine, making only short runs now and then and seldom getting thoroughly warmed up, is likely to accumulate an increasing amount of water in the oil tank. In freezing weather this water will become slush or ice and if allowed to accumulate too long, may block the oil lines and cause damage to the engine.

Water mixed with oil for some time forms sludge that is harmful to the engine and causes undue wear of various working parts. Therefore, in winter the oil change interval should be shorter than normal for all engines, and any engine used only for short runs must have oil drained frequently along with a thorough tank flush-out before new oil is put in tank.

The further below freezing the temperature drops, the shorter the oil change interval should be.

### Hydraulic Lifter Oil Filter Screee (Figure 35) (1340cc Engines Only)

The hydraulic lifter oil filter screen is located in the crankcase above the oil pump. Your dealer will inspect the screen every 5000 miles. Oil screen is installed with closed end up.

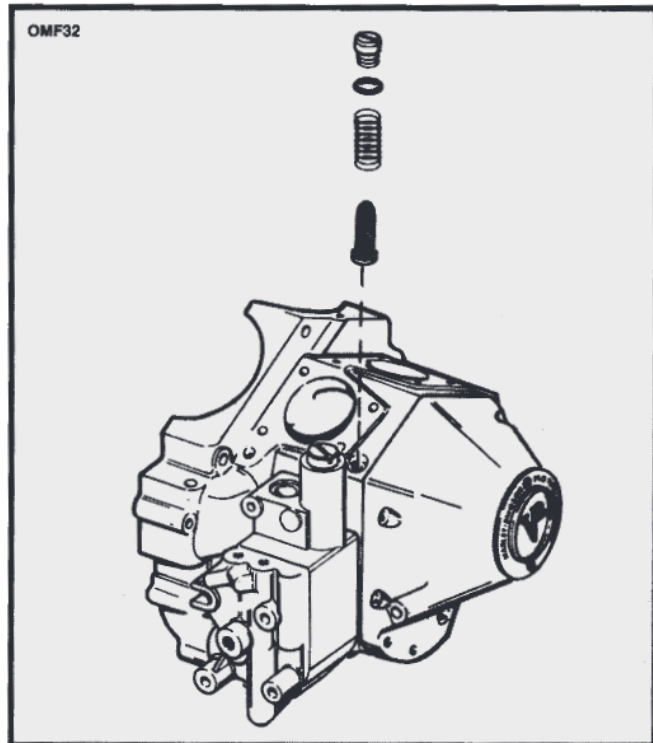


Figure 35. Hydraulic Lifter Oil Filter Screen

# TRANSMISSION LUBRICATION

## 1340cc Models

The transmission lubricant level should be checked monthly. When filling the transmission, use Harley-Davidson TRANSMISSION LUBRICANT, Part No. 99892-84.

### NOTE

*When checking the transmission lubricant level, motorcycle should be standing STRAIGHT UP, not leaning on the jiffy stand.*

### NOTE

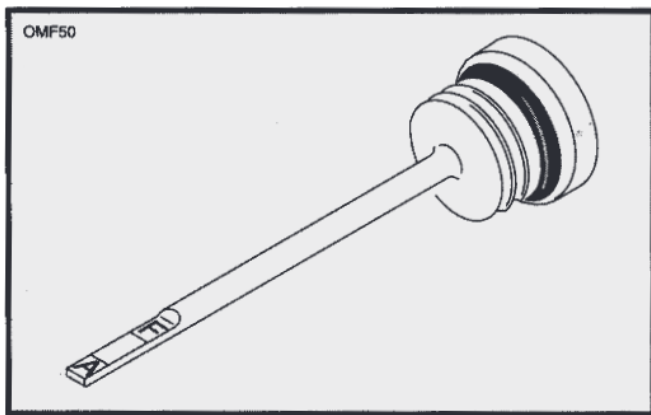
*Keep motorcycle upright for a short period of time to equalize lubricant level in the transmission compartments.*

When the engine reaches normal operating temperature, turn the engine off and position motorcycle STRAIGHT UP and LEVEL.

See Figure 36. Remove the threaded filler plug. Clean dipstick. Put dipstick filler plug back into hole, but do not screw in. Remove dipstick and take reading. Lubricant level should be between the two marks on the dipstick. Add lubricant if necessary.

Do not overfill or leakage may occur. The transmission capacity is approximately 24 ounces. When reinstalling the

filler plug, tighten it to 25-75 in-lbs (finger tight).



**Figure 36. Transmission Lubricant Dipstick - 1340cc**

The transmission should be drained and refilled with fresh lubricant after the first 500 miles and thereafter seasonally or every 5000 miles, whichever comes first.

On FLT models, the transmission magnetic drain plug is located underneath the transmission, in the middle of the case. When installing the drain plug, tighten it to 7 ft-lbs torque.

On Dyna Glide models, the transmission magnetic drain plug is located underneath the transmission, in the middle, right side of the case. When installing the drain plug, tighten it to 7 ft-lbs torque.

On the Softail models, the transmission magnetic drain plug is located at the right side of the transmission housing. Install drain plug so it projects 0.16-0.18 in. above surface of housing.

On all models, remove foreign material from end of plug.

 **WARNING**

**Do not overtighten drain plug. When draining and refilling the transmission, be careful that dirt and debris do not get into the case. Do not allow draining lubricant to get on rear wheel, tires or brakes. Traction could be adversely affected.**

*NOTE*

*XLH models transmission and primary chaincase share common lubricant supply.*

## **PRIMARY CHAINCASE LUBRICATION - GENERAL**

Lubrication is a major factor in the performance and service life of the clutch components. Use appropriate Harley-Davidson chaincase lubricant for all operating temperatures. (See 1340cc Models, XLH Models.)

Chaincase lubricant should be changed initially at 500 miles and every 5000 miles thereafter. Chaincase capacity is approximately 38-44 ounces in FLT models, 30-36 ounces in Softail and Dyna Glide models and 32 ounces in XLH models.

## **CHECKING CHAINCASE LUBRICANT**

### **1340cc Models**

1. Position motorcycle STRAIGHT UP and LEVEL.
2. See Figure 37. Remove screws and washers that secure clutch inspection cover.
3. Remove clutch inspection cover carefully to avoid damaging O-ring or finish on cover.
4. Primary chaincase lubricant should be at the bottom of the clutch diaphragm spring. Use only PRIMARY CHAINCASE LUBRICANT, Part No. 99887-84.

 **CAUTION**

**Replace O-ring if damaged or not sealing properly to avoid lubricant leakage.**

5. Replace clutch inspection cover and secure with screws and new washers. Tighten to 4-6 ft-lbs torque. Do not overtighten.

OMF34

883cc,  
1200cc

1340cc  
(typical)

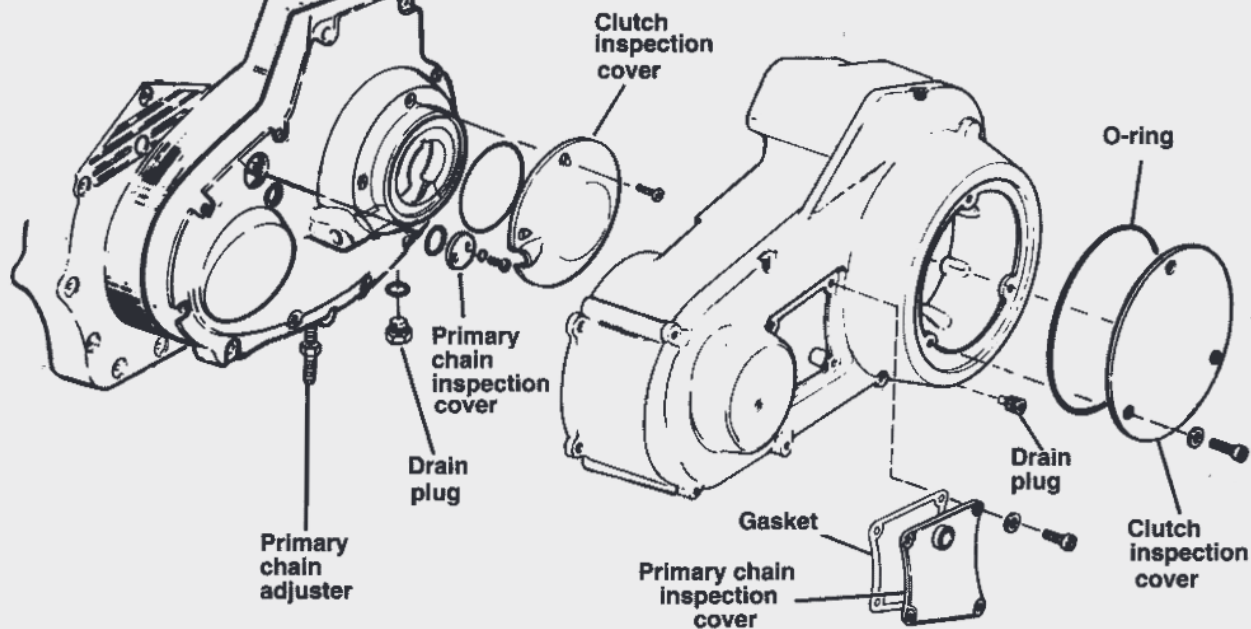


Figure 37. Primary Chaincase

**⚠ CAUTION**

**When draining or refilling with lubricant, do not allow dirt or debris to enter chaincase. Do not allow draining lubricant to get on rear wheel, tire, or brake components.**

**NOTE**

*Whenever draining chaincase lubricant, inspect and clean chaincase magnetic drain plug.*

Check clutch adjustment every 5000 miles. We recommend your Harley-Davidson dealer perform these services for you.

## **STOPPING THE ENGINE**

Use only Harley-Davidson SPORT-TRANS FLUID Part No. 99896-88 for all operating temperatures. Primary chaincase and transmission capacity is 32 U.S. ounces. Drain while lubricant is hot.

See Figure 37. The drain plug is located under the clutch, on the underside of the chaincase. The filler access is the clutch inspection cover. To determine correct lubricant level in the transmission and chaincase compartments, proceed as follows:

1. Stand motorcycle straight up. Motorcycle must remain in this position during entire procedure.

**NOTE**

*An opening between the transmission and the front chain compartments allows the same lubricant supply to lubricate the parts in both compartments.*

2. Remove primary chaincase clutch inspection cover screws, cover and drain plug.

**NOTE**

*If the lubricant is to be changed, remove drain plug and allow lubricant to drain. Remove foreign material from magnet on end of plug.*

3. Install drain plug and tighten to 10 ft-lbs torque.

**⚠ CAUTION**

**Do not over-tighten drain plug.**

4. Add approximately 32 ounces of lubricant, until it reaches bottom of clutch diaphragm spring.
5. Place clutch inspection cover in position on the primary cover and install and tighten cover screws.



## PRIMARY CHAIN

Primary (front) chain adjustment should be checked initially at 500 miles, every 5000 miles thereafter and serviced as necessary. If the chain is allowed to run loose, it will cause the motorcycle to jerk when running at low speed, and chain and sprockets will wear excessively. If this happens, see your dealer or Service Manual for adjustment procedure.

## REAR DRIVE BELT

The rear drive (secondary) belt inner tooth surface has a thin coating of polyethylene. During initial operation, this coating will wear as it is burnished into the belt fabric. This is a normal condition and not an indication of belt wear.

Belt tension should be checked after the first 500 miles and every 2500 miles thereafter.

### NOTE

*Perform belt tension check BEFORE operating vehicle. Vehicle should be at room temperature and dry, or you may not get a correct measurement.*

See Table 10 and Figure 38. Apply 10 lbs of force at the mid-point of the belt's appropriate strand. The deflection should be upward as shown. On 1340cc models, rear wheel must be on the ground and one rider sitting on the motorcycle. On XLH models, rear wheel must be on the ground with NO ONE on the motorcycle.

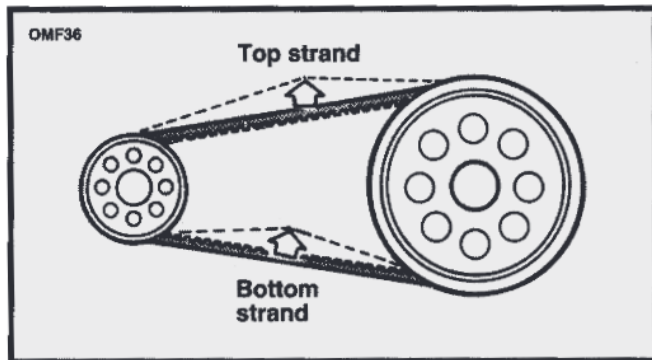


Figure 38. Belt Deflection

Table 10. Belt Deflection

MODEL	DEFLECTION (Measured With 10 lbs Force)	
FLSTC/F/N, FXSTC/S	3/8 - 1/2	(@ TOP STRAND)
Dyna Glide, FLT	5/16 - 3/8	(@ BOTTOM STRAND)
XLH	9/16 - 11/16	(@ BOTTOM STRAND)

Use BELT TENSION GAUGE, Part No. HD-35381 to check belt tension. If belt requires adjustment, see your Harley-Davidson dealer, or follow instructions given in the applicable Service Manual.

Check rear brake caliper position on rear brake disc. Disc should run true within brake caliper.

### WARNING

**A misaligned rear wheel and/or brake caliper could cause rear brake disc to bind, resulting in personal injury.**

## CHASSIS LUBRICATION

### Greasing

1. Use recommended wheel bearing grease for steering head bearings, wheel bearings and rear fork bushings. Use a multi-purpose chassis grease for other applications.
2. Repack front and rear wheel bearings every 10,000 miles (more often in adverse conditions), or yearly if operated under winter conditions or prior to storage. Replace seals and axle spacers if they show any wear or distortion.

3. Remove and lubricate handlebar throttle control grip sleeve with fresh graphite every 5000 miles, once each year, or when operation indicates lubrication is necessary.
4. Every 5000 miles lubricate throttle control cables, speedometer drive cable and clutch control cable. Lubricate front brake hand lever and clutch control hand lever only if necessary.
5. On FLT and Softail models, grease the rear brake pedal and shifter shaft pivots every 5000 miles at the fitting.
6. On XLH and Dyna models, pack rear swing arm pivot bearings with fresh grease at 10,000 mile intervals. Inspect rear swing arm pivot bushings.
7. Pack the steering head bearings with fresh grease at 10,000 mile intervals or 2 years, whichever occurs first.
8. Lubricate the jiffy stand mechanism with Loctite Lubriplate<sup>®</sup> every 5000 miles.

### Oil Applications

All control connections and parts as indicated in the REGULAR MAINTENANCE INTERVALS CHART should be oiled regularly, particularly after washing motorcycle or driving in wet weather.

## Front Fork Oil

Drain front fork oil and refill every 10,000 miles or annually. If fork does not appear to be working properly or an appreciable amount of oil leakage should develop, see your Harley-Davidson dealer. If there is insufficient oil in either side of fork, the rebound action will be incorrect.

The Springer fork does not require fork oil.

## FUEL STRAINER

See Figure 17. A screen type fuel strainer is located on top of the supply valve inside the fuel tank. Screen should be inspected/cleaned every 5000 miles. Check the fuel valve, lines and fittings for leakage as part of the pre-ride inspection.

## CARBURETOR

The carburetor has been specifically designed for emissions control operation. All jets are fixed at the factory.

Carburetor controls include throttle, enrichener and idle speed adjusting screw. Operation should be checked and

adjusted after the first 500 miles and every 5000 miles thereafter.

### CAUTION

**Operation at higher altitudes (approximately 4000 ft. elevation) may require carburetor modifications for best engine performance. See your Harley-Davidson dealer for these adjustments.**

We recommend that any carburetor service be performed by your Harley-Davidson dealer.

## AIR CLEANER (Figure 39)

The engine air cleaner is a paper/wire mesh air filter element.

Remove air cleaner cover and inspect filter element at least every 5000 miles, or more often under dusty conditions.

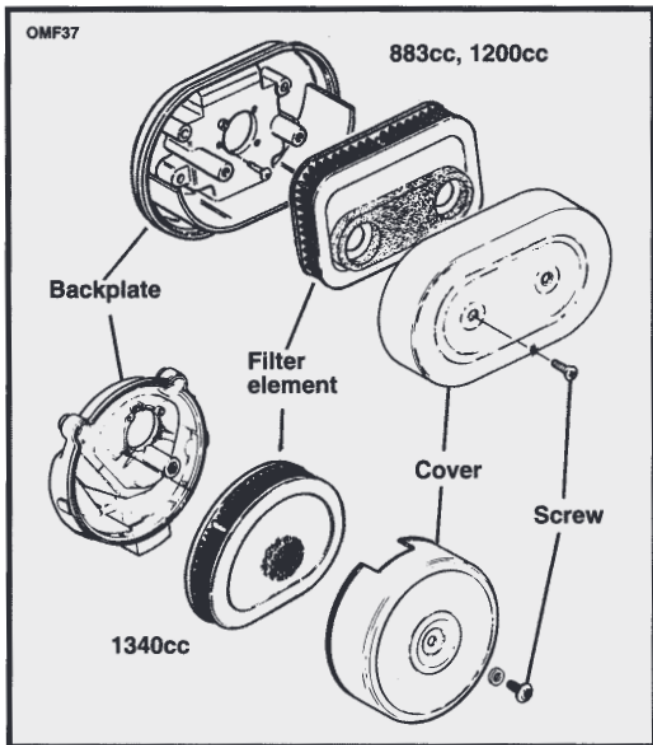


Figure 39. Air Cleaner

### **⚠ WARNING**

Low pressure air can blow debris into your face and eyes. Always wear eye protection or a face shield when using pressurized air.

The paper/wire mesh air filter element should be washed in luke warm water with a mild detergent. Allow filter to either air dry or blow it dry, from the inside, with low pressure air. Do not use an air cleaner filter oil on the Harley-Davidson paper/wire mesh air filter element.

### **⚠ CAUTION**

Do not run engine without filter element in place. Debris could be drawn into engine, causing damage.

## **HYDRAULIC LIFTERS**

Lifters are self-adjusting, hydraulic type. They automatically adjust length to compensate for engine expansion and valve mechanism wear, keeping the valve mechanism free of lash when the engine is running.

When starting an engine which has been turned off even for a few minutes, the valve mechanism may be slightly noisy until the hydraulic units completely refill with oil.

If at any time, other than for a short period immediately after engine is started, valve mechanism becomes abnormally noisy, it is an indication that one or more of the hydraulic units may not be functioning properly.

Always check the oil supply in the oil tank first, since normal circulation of oil through the engine is necessary for proper operation of the hydraulic units.

If there is oil in the tank, the units may not be functioning properly because of dirt in the oil supply passages leading to the lifter units. Inspect and clean tappet oil supply filter screen (1340cc engines, Figure 35). See your Harley-Davidson dealer for service.

## CLUTCH (Figure 40)

The clutch control cable must be oiled and adjusted every 5000 miles to compensate for lining wear. The need for attention to clutch and controls will be indicated by the clutch slipping under load, or dragging when released. In this situation, the control cable adjustment should be the first thing to be checked. See your Harley-Davidson dealer for proper service.

## BRAKES

Every 2500 miles, check brake pads and brake discs for wear. Every 5000 miles, check the fluid level in the master cylinder reservoirs. Use only D.O.T. 5 SILICONE HYDRAU-

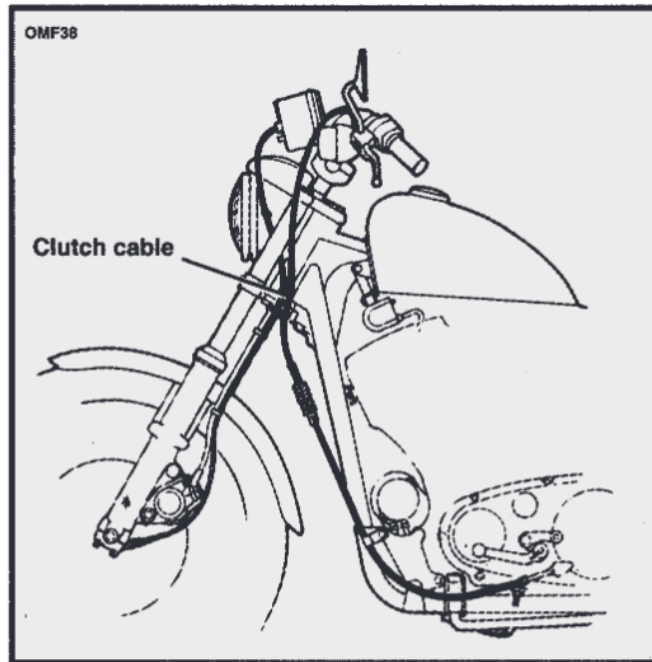


Figure 40. Clutch Control Cable (Typical)

LIC BRAKE FLUID approved for brake system use and that is available from your Harley-Davidson dealer.

**⚠ WARNING**

Because brake performance is a critical safety item, brake system servicing requires special tools, correct replacement parts and procedures. We recommend that you see your Harley-Davidson dealer for these services.

**⚠ WARNING**

Brake pads must be inspected for wear every 2500 miles. However, if you ride under adverse conditions, steep hills, heavy traffic, etc., or if you tend to use one brake only, more frequent inspection, 1000 miles or less, will be necessary. We do not recommend using only one brake.

See Figure 41. Visual inspection of brake pads can be made without removing the caliper by viewing the lower area of each caliper with the aid of a flashlight. If the brake pad friction material is 1/16 in. thick or less (the thickness of a nickel), **the pads must be replaced immediately**. Always replace brake pads in pairs. If this routine maintenance is ignored, loss in braking performance and brake system component damage could occur.

See Figures 42, 43. The rear brake outer pad on all models can be measured from the caliper bracket side using a thin plastic 6 in. rule. Place the rule against the brake disc through the space alongside the caliper. The outer surface of the brake pad backing plate should measure 1/4 in. or more

away from the brake disc. If it measures less than 1/4 in., replace both brake pads immediately.

*NOTE*

*This 1/4 in. dimension includes the thickness of the backing plate plus minimum 1/16 in. for friction material.*

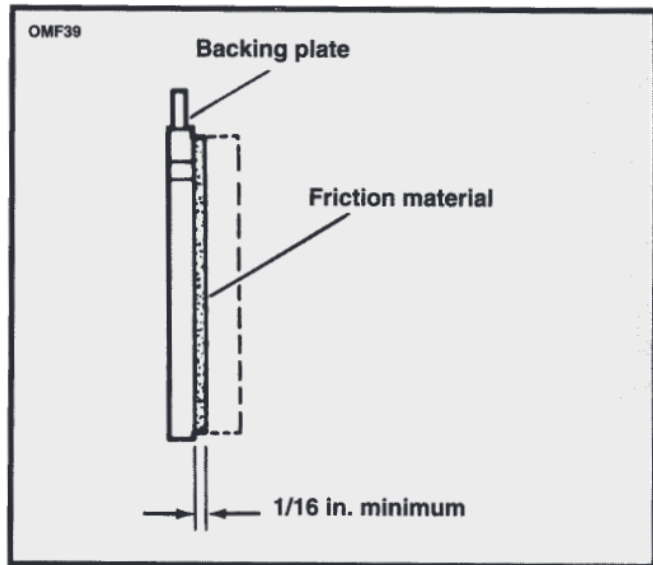


Figure 41. Brake Pad - Side View

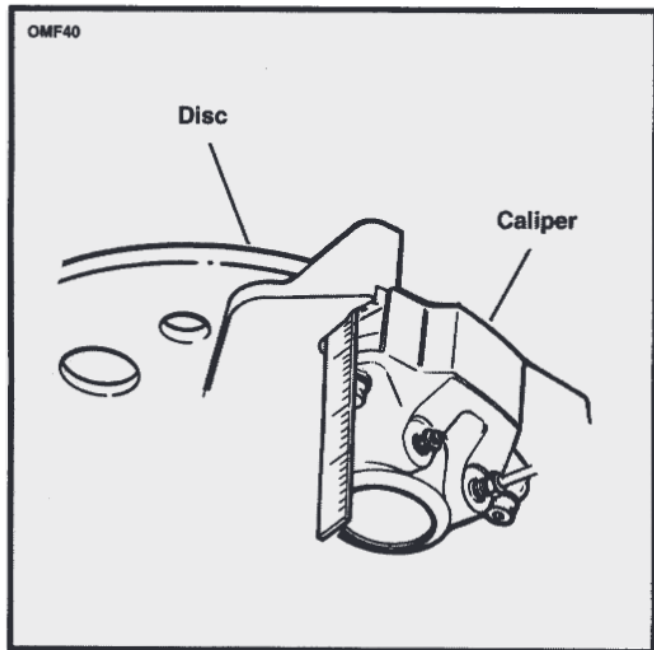


Figure 42. Measuring Rear Brake Outer Pad - 1340cc Models

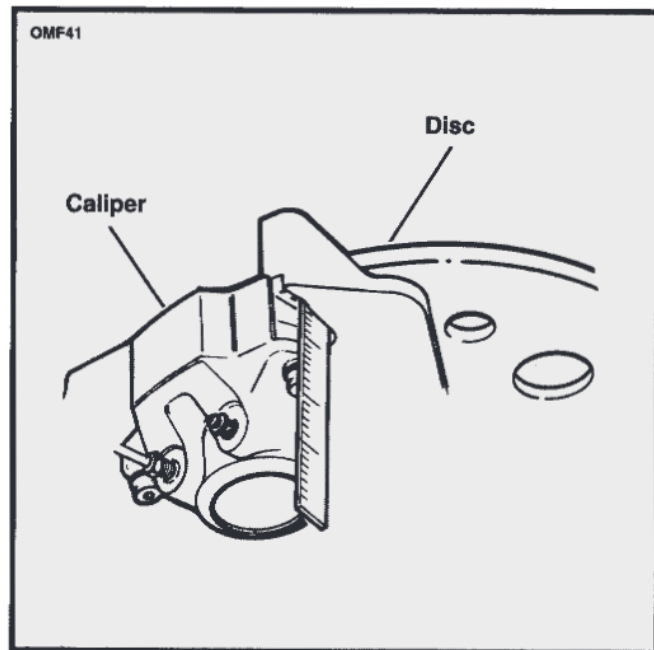


Figure 43. Measuring Rear Brake Outer Pad - 883cc, 1200cc Models

## TIRES

Be sure to keep tires properly inflated. See TIRE DATA, for correct cold tire inflation pressures. Check before riding when tires are cold. Do not over-inflate tires.

### WARNING

**Improper tire inflation will cause abnormal tread wear and could result in unstable handling. Under-inflation could result in the tire slipping on the rim, or sudden tire failure.**

Check inflation pressure and inspect tread for punctures, cuts breaks, etc., at least weekly if in daily use; or before each trip, if used occasionally.

### WARNING

- **Riding with excessively worn, unbalanced or improperly inflated tires is hazardous and will adversely affect traction, steering and handling.**
- **Same as original equipment tires should be used. Other tires may not fit correctly, could cause unstable handling, and may be hazardous to use.**
- **Because tires, tubes and wheels are critical safety items, and servicing these items requires special tools and skills, we recommend you see your dealer for these services.**
- **Do not attempt to use damaged or punctured and**

**repaired tire(s). Once a motorcycle tire has been damaged or punctured, it is unsafe to use.**

- **A tire can be severely damaged and not show the damage externally. If you strike an object, such as a curb, at speed, internal damage may result which is not visible from the outside. Always remove and carefully inspect the inside as well as the outside of the tire for damage. A damaged tire can fail, causing personal injury.**

## SHOCK ABSORBERS

Shock absorbers and rubber bushings should be inspected at 500 miles and every 5000 miles thereafter for leaks and bushing deterioration.

### NOTE

*Softail models shock absorbers are not repairable. See your dealer if leakage or malfunction occurs.*

## VEHICLE ALIGNMENT

### Isolation Mounted Engine Models

The stabilizer links and engine mounts should be checked for wear according to Service Manual procedures after the first 500 miles and every 5000 miles thereafter. Stabilizer links should be replaced if they have 0.025 in. or more end play. See your Harley-Davidson dealer for this service.



## WARNING

Vehicle alignment is important. Vehicle stability is adversely affected if wheels are out of alignment. Major alignment of the front and rear wheel is partially controlled by one or two stabilizer links. One at the top of the engine and, on some models, one at the front of the engine. Do not change the adjustment of the link(s). Changing the adjustment as little as 1/3 turn could adversely affect motorcycle stability.

### All Models

Vehicle alignment should be checked every 5000 miles and whenever the rear wheel is removed and installed or when the rear drive belt is adjusted.

## WARNING

**Major alignment should be performed only by your Harley-Davidson dealer using Service Manual procedures.**

## WHEEL BEARINGS

Bearings should be repacked at 10,000 mile intervals, once a year, or prior to storage. Use proper wheel bearing grease and new seals. Excessive play or roughness indicates worn bearings that will require replacement. Check each time wheel is removed.

## FRONT FORK BEARINGS

### WARNING

**Adjustment of front fork bearings is critical. Improperly adjusted bearings will adversely affect motorcycle handling and stability. We recommend that fork bearing adjustments be performed by your Harley-Davidson dealer.**

Check front fork for proper bearing adjustment at 500 miles and every 5000 miles thereafter. Bearings should be repacked at 10,000 mile intervals. With motorcycle front end raised off the floor, be sure front fork turns freely without any binding or interference and that there is no appreciable front to rear fork shake indicating excessive bearing looseness. Steering head bearings should be adjusted according to Service Manual procedure, if necessary.

## REAR FORK PIVOT SHAFT

On all models except Softails, the tightness of the rear fork pivot shaft fastener should be checked after the first 500 miles and every 5000 miles thereafter. On XLH and Dyna Glide models, bearings should be repacked at 10,000 mile intervals.

## SPARK PLUGS

Check the spark plugs every 5000 miles and replace if necessary. Replace the spark plugs every 10,000 miles on all models.

Disconnect spark plug cables from plugs by pulling on the molded connector caps. Connection is the simple snap-on type.

### CAUTION

**Do not pull on wires because this may damage the internal conductor causing high resistance and reduction in firing voltage.**

Before installing spark plugs, the gap should be checked and adjusted if necessary to 0.038 - 0.043 in.

Be sure that your motorcycle has the correct spark plug:

MODEL	SPARK PLUG
1340cc Models .....	Harley-Davidson 5R6A
883, 1200cc Models .....	Harley-Davidson 6R12

Spark plugs must be tightened to the torque specified for proper heat transfer. See chart below. If a torque wrench is not available, tighten plugs finger tight; then tighten an additional one quarter turn with a spark plug wrench.

MODEL	TORQUE (ft-lbs)
1340cc Models .....	18 - 22
883, 1200cc Models .....	11 - 18

## IGNITION TIMING

Ignition timing is preset at the factory. Spark timing is advanced electronically, as engine speed increases or decreases, to suit starting, low speed and high speed requirements.

Ignition timing should be checked every 5000 miles. If ignition timing is not correct, see your Harley-Davidson dealer.

The engines in these motorcycles have been designed specifically to achieve optimum fuel economy within exhaust emission controls. Ignition characteristics have been developed to provide maximum engine performance and driveability.

### NOTE

- *The ignition control unit uses a two-stage curve. In certain transient load conditions, as the throttle is opened, the timing changes from normal to fully advanced. At this point, the operator can sometimes hear a noise that is similar to pre-ignition detonation.*
- *This noise should not be confused with detonation, which can be stopped by the use of a higher grade fuel.*

*It is caused by the instant pressure rise in the combustion chambers as the spark advances rapidly. This noise doesn't affect engine performance.*

## HEADLAMP (Figure 44)

The headlamps are either sealed beam or replaceable quartz halogen bulb type.

### NOTE

*When replacement is required, use only the specified sealed beam unit or bulb, available from your Harley-Davidson dealer. Improper wattage sealed beam or bulb may cause charging system problems.*

### CAUTION

Never touch the quartz bulb with your fingers. Fingerprints will etch the glass and cause the bulb to fail. Always wrap the bulb in paper or a clean dry cloth during handling.

### WARNING

The bulb contains Halogen gas under pressure. Handle bulb carefully and wear eye protection to avoid possible personal injury.

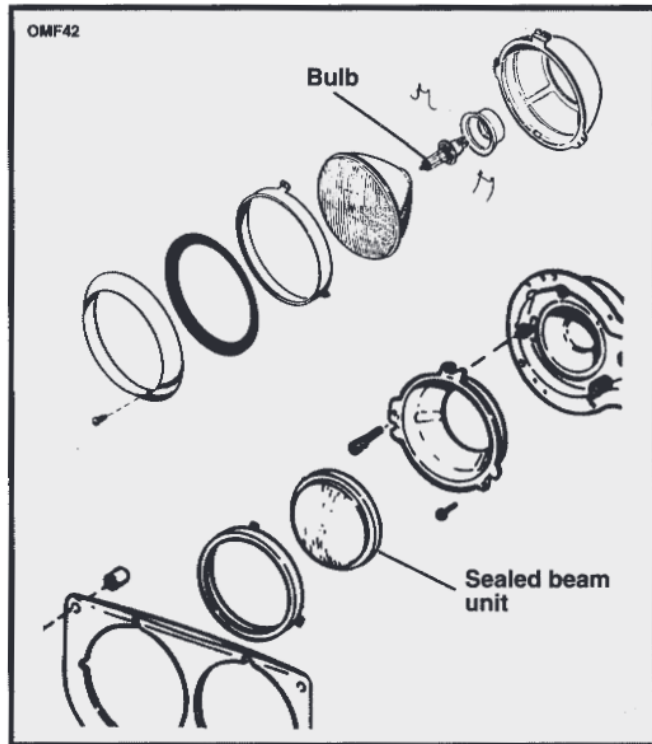


Figure 44. Headlamp

## ALTERNATOR CHARGING RATE AND VOLTAGE REGULATOR

See Figure 45. The alternator output is controlled and changed to direct current by the voltage regulator located at the front of the engine. The voltage regulator increases charging rate when battery is low or lamps are lit, decreases charging rate when no lamps are lighted and when battery charge is up. This unit requires no interval attention. If any electrical system trouble is experienced, that might be traceable to the alternator or voltage regulator, the motorcycle should be taken to your Harley-Davidson dealer who has the necessary electrical testing equipment to give the required attention.

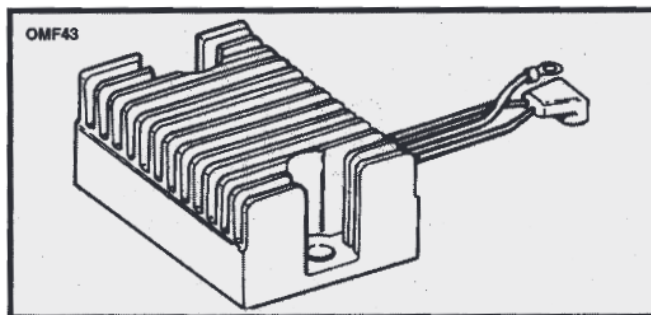


Figure 45. Voltage Regulator

## BATTERY (Figure 46)

See Table 11 for battery location. See SEAT REMOVAL and INSTALLATION in the following section to remove seat for battery inspection.

Table 11. Battery Location

MODEL	LOCATION ON MOTORCYCLE
FLT Models	Under seat
Softail Models	Under seat
Dyna Models	Right side
XLH Models	Left side

It is the care given a battery, rather than the time and miles of service, which is most important in determining its life.

Inspect the battery electrolyte level at least once a month, adding pure distilled water as often as necessary to keep the solution above the plates. If the motorcycle is not used for an extended period of time, check battery solution level before placing in service.

Remove the battery filler plugs. With a hydrometer or syringe, add distilled water to each cell to raise level of solution between upper and lower level limits shown on battery.

Motorcycle should be in an upright position to check the solution level.

Clean connections and check tightness every 2500 miles or monthly.

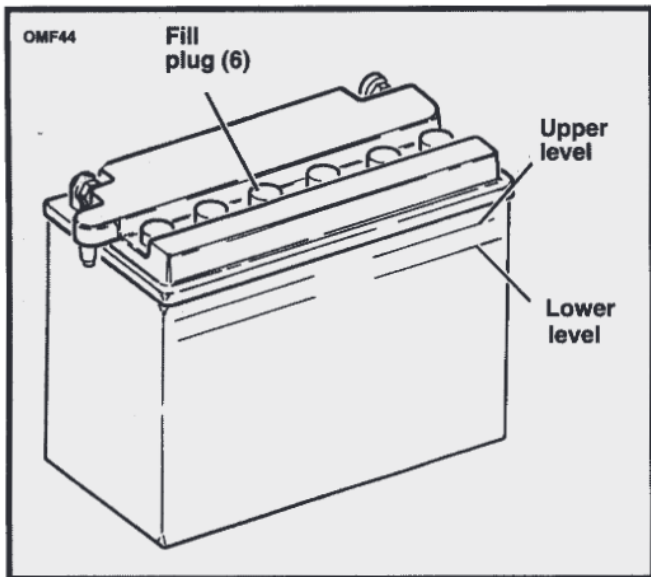


Figure 46. Battery

**⚠WARNING**

Batteries contain sulfuric acid which can cause severe burns. Avoid contact with skin, eyes or clothing.

**ANTIDOTE**

External - Flush with water.

Internal - Drink large quantities of water followed by milk of magnesia, vegetable oil, or beaten eggs. Call doctor immediately.

**⚠WARNING**

Batteries produce explosive hydrogen gas at all times - especially when being charged. Keep cigarettes, open flame, and sparks away from battery at all times. Ventilate area when charging battery. Always protect hands. Protect eyes with shield or goggles when working near a battery or acid. **KEEP BATTERIES AND ACID OUT OF THE REACH OF CHILDREN!**

**⚠CAUTION**

If battery is filled to a higher level than specified, some of the solution will be forced out through the vent tube when battery is charging. This will not only weaken the solution, but also may damage parts near the battery. Keep battery clean and lightly coat terminals with petroleum jelly to prevent corrosion. Do not overtighten

**terminal connections. To prevent battery case damage caused by pressure build-up, be sure vent tube is properly routed and not kinked or obstructed.**

## Battery Sulfation

Battery sulfation is the usual reason batteries stop holding an electrical charge.

Sulfation occurs when a battery stands in a discharged condition (low specific gravity of electrolyte) over a period of time or when the battery plates are exposed to the air because of low electrolyte level.

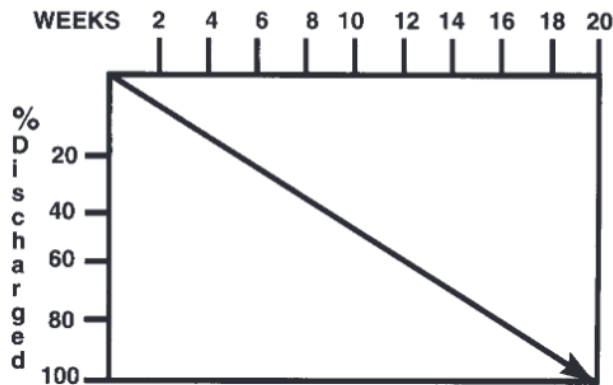
This causes the active lead materials to crystallize, permanently damaging the affected area. When this happens the battery will not hold a charge, and it cannot be restored to full capacity.

It is not true that the battery is no longer discharging when the motorcycle is parked and the ignition is turned off. There are two possible ways for the battery to discharge itself.

1. Self Discharge: This is normal and occurs because the battery discharges internally. See Table 12. Batteries discharge continuously at a rate depending on the ambient temperature and the battery's state of charge.
2. Current Drain: This occurs through electrical accessories

that require continuous electricity, such as radio memories, clocks, etc. The current drain of each motorcycle is different depending on the model, model year and what electrical accessories it has.

**Table 12. Battery Self Discharge Rate at 77° F**



To reduce battery self discharge, remove and store the battery in a cool, (not freezing) dry place when the motorcycle is being stored.

### CAUTION

- The more discharged a battery is, the more easily it can freeze.
- You should use **ONLY** a trickle charger to charge a battery. Do not trickle charge battery more than 24 hours at a time. Charging more than 24 hours at a time will damage the battery. Before charging, be sure the electrolyte level is above the plates.

Use a 2 Amp, 12 Volt trickle charger and trickle charge stored battery once a month. Keep the electrolyte level above the plates.

## JUMP STARTING PROCEDURE

Harley-Davidson does not recommend jump-starting a motorcycle; however we realize that there may be circumstances when it is done. Therefore, we suggest jump-starting be done as follows:

### WARNING

When making connections, be sure the jumper cable clamps do not accidentally touch each other or anything else except battery terminals or appropriate ground.

### WARNING

Do not smoke or allow sparks while performing this procedure. Smoking or sparks could cause an explosion.

### NOTE

*This procedure presumes the BOOSTER battery is in another vehicle.*

### CAUTION

Be sure radio (if equipped) is turned off. A voltage surge will erase or damage the radio memory circuits.

### CAUTION

**All Harley-Davidson motorcycles have a 12 Volt battery and a 12 Volt electrical system. Be sure the the booster vehicle has a 12 Volt system or electrical components may be damaged.**

1. Turn off all unnecessary lights and accessories.

### POSITIVE CABLE

2. See Figure 47. Connect one end of a jumper cable to the DISCHARGED battery positive (+) terminal.
3. Connect the other end of the same cable to the BOOSTER battery positive (+) terminal.

### NEGATIVE CABLE

4. Connect one end of a jumper cable to the BOOSTER battery negative (-) terminal.

### WARNING

**Suggested spot for ground cable connection is the**

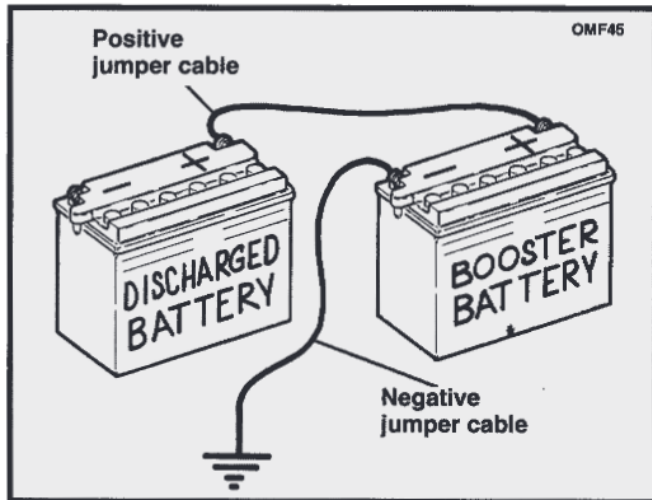


Figure 47. Jump Start Cable Connections

#### ENGINE CASE BOLTS.

Do not connect negative cable to or near the discharged battery negative terminal. If you do, a spark could cause an explosion.

Be sure you do not connect the negative cable near the battery vent tube. A spark could cause an

explosion.

- Do not connect the negative cable to painted or chrome parts. They will become discolored at the attachment point.
5. Connect other end of the same cable to a safe ground, (away from the DISCHARGED battery).
  6. Start motorcycle.
  7. Disconnect cables in reverse order of steps 2, 3, 4, 5. That is: steps 5, 4, 3, 2.

## SEAT

To check the battery on all motorcycles except the XLH models, you will have to remove the seat. See BATTERY, in the preceding section.

## REMOVAL

### NOTE

*There is a nylon washer between the rear seat bracket and the fender. Do not lose this washer, do not substitute a metal washer and do not install seat without this washer. Any of the above actions will result in scratched fender paint.*

- This is a general procedure. It applies to all motorcycles with batteries under the seat; but with differences according to the particular motorcycle. For example:



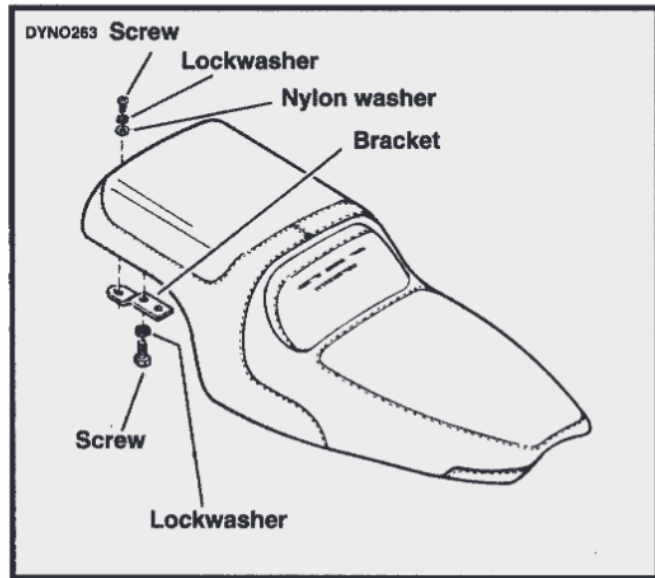
- If you have an FLT model with the Tour-Pak in the forward position, you will have to unbolt the Tour-Pak and move it to the luggage carrier rear position.
  - If you have a sissy bar installed on your bike, you will have to remove the sissy bar.
  - On FLSTC/F/N models, there is an additional fastener at each side of the operator's seat.
  - On Dyna models, you will have to remove the battery side cover and top cover. To do this, you will have to remove the seat. See DYNA GLIDE BATTERY COVER REMOVAL, following.
1. See Figure 48. Remove screw and washer from rear seat bracket.
  2. Slide seat to the rear of the motorcycle, under grab strap, and lift.

**NOTE**

*There is a U-shaped bracket at the front of the seat that slips under a frame bracket.*

**INSTALLATION**

1. Slide U-shaped bracket under frame bracket. Install



**Figure 48. Seat and Mounting Hardware (Typical)**

screw and washer. Be sure nylon washer is placed between the seat bracket and the fender.

2. Install screw.

There is no need to remove the seat bracket and its fasteners from the seat pan.

## Dyna Glide Battery Cover Removal (Figure 49)

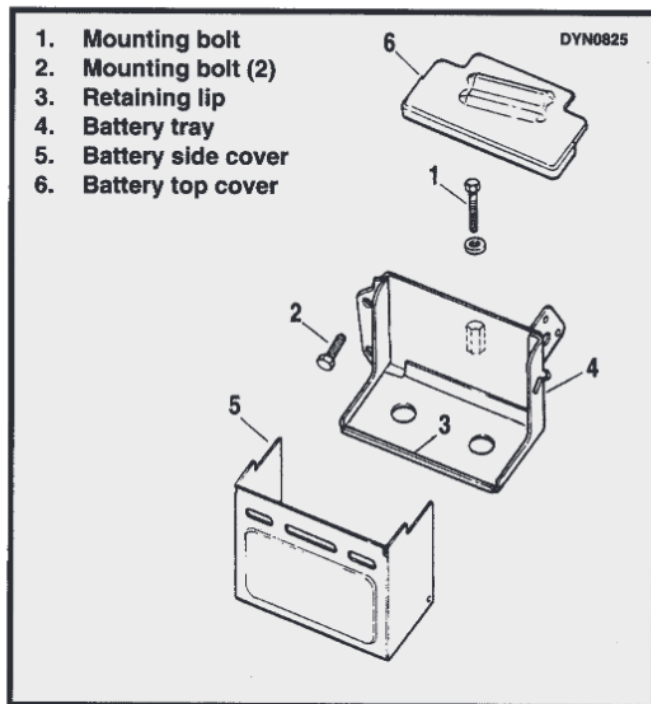
1. Remove seat. See SEAT.
2. See Figure 49. Loosen two rear mounting bolts (2) of battery tray (4) (between battery and rear fender).
3. Disconnect battery cables, negative cable first.
4. Loosen inboard mounting bolt (1) of battery tray, between battery and frame backbone, just enough to remove battery top cover (6) and side cover (5).

## Battery Cover Installation (Figure 49)

### **CAUTION**

**Connecting cables to wrong battery terminals can cause serious damage to motorcycle electrical system.**

1. Clean cable connectors with wire brush or sandpaper to remove oxidation. Coat with Vaseline<sup>®</sup>.
2. Check battery vent tube to be sure it is not crimped or obstructed.
3. Connect cables to proper terminals. Connect positive cable first, then connect negative cable. Connect



**Figure 49. Dyna Glide Battery Tray and Mounting Hardware**

positive cable to positive terminal. Connect negative cable to negative terminal.

4. Install battery side cover (5) making sure that bottom of its outboard side is properly seated inboard of the retaining lip (3) on the base of the battery tray.
5. Install battery top cover (6) over side cover and battery.
6. Tighten inboard mounting bolt (1) until battery top cover (6) firmly contacts frame tube.
7. Tighten two rear mounting bolts (2) to 12 ft-lbs torque.
8. Install seat. See SEAT.

## CIRCUIT BREAKERS

All models have several circuit breakers to protect the motorcycle wiring. They are: main, lighting, accessory, and ignition. Sound system equipped motorcycles may have one or two additional circuit breakers. FLT models, except the FLHR, have an additional circuit breaker for the brake light circuit.

Each of these breakers is self-resetting and automatically returns steady power to the circuit when an electrical fault that causes it to trip is found and corrected. If the electrical fault is not found and corrected, the breaker cycles on and off

causing the motorcycle to operate erratically and eventually the battery will lose its charge.

For electrical problems, it is best to see your Harley-Davidson dealer who has necessary parts and equipment to perform electrical services.

## FUSES

FLT Ultra models have a fuse and filter board for the radio and related equipment in the fairing and/or under the left side cover.

## GENERAL MAINTENANCE

Chrome and aluminum parts must be maintained regularly to ensure that they retain their original shine and luster. Care should be taken to keep your new Harley-Davidson motorcycle cleaned and waxed as often as possible to inhibit rust and corrosion.

## CLEANING YOUR MOTORCYCLE

To aid you in keeping your motorcycle clean, see your Harley-Davidson dealer for cleaning, polishing and waxing products.

### WARNING

Observe warnings and cautions given on labels of cleaning compounds to prevent personal injury or damage to your motorcycle.

### WARNING

Do not wash your brake discs with any cleaners that contain either chlorine or silicon. Chlorine will cause rust and silicon will make the brake discs slick, impairing brake function.

### CAUTION

When washing your motorcycle, be careful not to get the brakes, engine, mufflers or air cleaner too wet. Wet brake pads or a wet disc may affect braking, and a wet engine could start and run poorly until it dries. Start engine immediately after washing and be sure brakes and engine are operating properly before riding in traffic.

## ACCESSORIES MAINTENANCE

### NOTE

*Many Harley-Davidson accessories and seats are either made of leather or have leather inserts. Natural materials age differently and require different care than man-made materials. Seat covers and panels made of leather will gain "character", such as wrinkles, with age. This is normal. A fine, aged patina and character wrinkles are a sign of the high quality materials that your Harley-Davidson contains.*

## LEATHER

Leather must be periodically cleaned and treated to maintain its appearance and extend its life. Clean and treat leather once a season or more frequently under adverse conditions.

### CAUTION

- Do not use bleach or detergents containing bleach on saddlebags, seats or tank panels.
  - Do not use ordinary soap to clean leather or fur. It could dry or remove the oils from the leather.
  - Use **ONLY** a good quality saddle soap to clean leather. Be sure you rinse saddle soap off thoroughly before treating leather.
  - Never try to dry leather quickly, using artificial means. Always let leather dry naturally, at room temperature.
1. Vacuum or blow dust off.
  2. Thoroughly clean leather with a good quality saddle soap, following manufacturer's directions. Rinse thoroughly with clean sponge or cloth and water. Allow leather to dry.
  3. Once leather is dry, treat with a good quality leather treatment, such as Harley-Davidson Leathercare®.
  4. Always allow leather to dry completely before using.

## CLOTH

1. Vacuum or blow dust off.
2. Use mild soap and warm water for more difficult stains on the cloth. Rinse thoroughly. Always allow cloth to dry completely before using.

## VINYL

Wash with a good quality detergent or S100<sup>®</sup>. Treat with Harley Saddle and Sidewall Saver<sup>®</sup> or a quality vinyl treatment.

## WINDSHIELDS

### CAUTION

Harley-Davidson windshields are made of Lexan<sup>®</sup>. Lexan<sup>®</sup> is a more durable and distortion-resistant material than other types of motorcycle windshield material, but still requires attention and care to maintain.

- **DO NOT use liquid windshield "protectors" on your windshield. Although they may work well on automobile safety glass, Harley-Davidson cannot ensure the results when used on Lexan<sup>®</sup> Harley-Davidson windshields. If you want to use a windshield pro-**

**tectant on your windshield, try Harley Glaze Polish and Sealant<sup>®</sup>.**

- **DO NOT use benzine, paint thinner, gasoline or any other types of harsh cleaner. They will damage the windshield surface.**

### NOTE

*Covering the windshield with a clean, wet cloth for approximately 15-20 minutes before washing will make dried bug removal easier.*

Use mild soap and warm water to wash the windshield. Wipe dry with a soft, clean towel.

## WHITEWALL TIRES

### WARNING

**If you get a cleaner on brake components, wipe it off immediately. Foreign substances of any kind on brake calipers or disc(s) may cause reduced braking efficiency, creating potential danger for the rider.**

Use a good quality, commercial whitewall cleaner and follow the manufacturer's directions.

## HINGES, LATCHES - FUEL DOOR, TOUR-PAK, SADDLEBAGS - FLT MODELS

Lubricate the rub points of latches and hinges using either Teflon Precision Lubricator® or Tri-flow® every 5000 miles. These lubricants resist attracting dust.

See Figures 25 and 50. Lubricate the "fingers" on the saddlebag latches, where they engage the hinge.

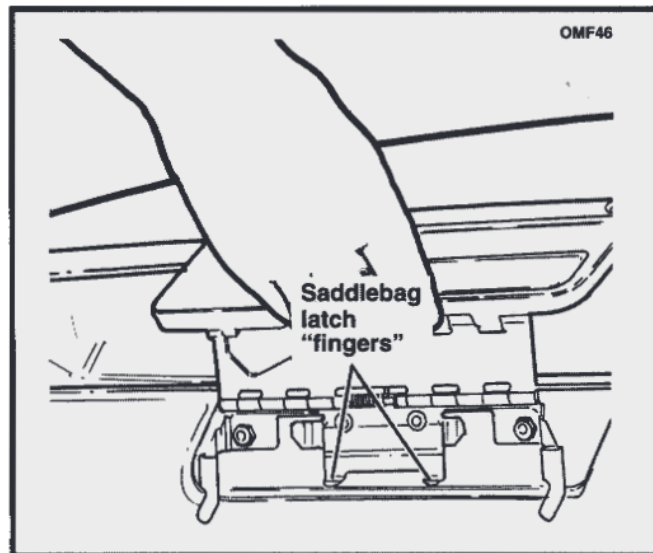


Figure 50. FLT Models Saddlebag Latch

## STORAGE

### CAUTION

Proper long-term storage is important for the safe, trouble-free operation of your Harley-Davidson motorcycle. If you do not do these tasks yourself, contact your Harley-Davidson dealer. He has the trained technicians who can complete the work according to Service Manual procedures using proper tools and equipment.

### Placing Motorcycle In Storage

If the motorcycle will not be operated for several months, such as during the winter season, there are several things which should be done to protect parts against corrosion, to preserve the battery and to prevent the build-up of gum and varnish in the carburetor.

### WARNING

**Fuel is flammable, Do not store motorcycle having gasoline in tank within the home or garage where open flames, pilot lights, sparks or electric motors are present.**

- Make a list of everything you do and fasten it to a hand-grip. When you take the motorcycle out of storage, this list will be your reference/check-list to get your motorcycle in operating condition.
1. Warm motorcycle to operating temperature; change oil

and turn engine over to circulate the new oil.

2. On both carbureted and fuel injected vehicles, fill fuel tank and add a gasoline stabilizer. Use one of the commercially available gasoline stabilizers, following the manufacturer's instructions. Run the engine until the gasoline stabilizer has had a chance to reach the carburetor float bowl/fuel injectors. On carbureted vehicles, turn fuel supply valve off.
3. Adjust the belt.
4. Check tire inflation. Adjust to proper inflation pressure. Wash and wax painted and chrome surfaces.
5. See BATTERY for proper battery care. Remove battery from the motorcycle and charge. Store the battery above freezing temperatures, trickle charge once a month and keep the electrolyte level above the plates.

### NOTE

*Disconnect the battery vent tube from battery before removing battery; or take note of vent tube routing so it is installed in the proper place when you remove vehicle from storage.*

### WARNING

**Keep battery away from areas that may have sparks or flames. A spark could cause an explosion.**

6. If motorcycle is to be covered, use a material such as light canvas, that will breathe. Plastic materials that do

not breathe promote the formation of condensation.

## Removal From Storage



**After extended periods of storage and prior to starting vehicle, place transmission in gear, disengage clutch and push vehicle back and forth a few times to ensure proper clutch disengagement.**

1. See BATTERY for proper battery care. Be sure plates are covered by electrolyte before charging. Fill the battery with distilled water to the proper level. Charge and install it.
2. Remove and inspect the spark plugs. Replace if necessary.
3. Clean the air cleaner element.
4. Start the engine and run until it reaches normal operating temperature. Turn off engine.
5. Check amount of oil in the oil tank. Check the

transmission lubricant level.

6. Check controls to be sure they are operating properly. Operate the front and rear brakes, throttle, clutch and shifter.
7. Check steering for smoothness by turning the handlebars through the full operating range.
8. Check tire pressure. Incorrect pressure will result in poor riding characteristics and can affect handling and stability.
9. Check all electrical equipment and switches including the stoplamp, turn signals and horn for proper operation.
10. Check for any fuel, oil or brake fluid leaks.



**Turn engine over a few times to be sure there is no oil in the crankcase; and that all oil has been pumped back into the oil tank. Stop engine and re-check oil level.**



# NOTES

## GENERAL

The following checklist of possible operating troubles and their probable causes will be helpful in keeping your motorcycle in good operating condition. More than one of these conditions may be causing the trouble and all should be carefully checked.

### WARNING

The troubleshooting section of this Owner's Manual is intended solely as a guide to diagnosing problems. Carefully read the appropriate sections of this manual before performing any work. Repair and maintenance operations not listed in this Owner's Manual are in the Service Manual and should be performed by your Harley-Davidson dealer.

## ENGINE

### Starter Does Not Operate or Does Not Turn Engine Over

1. Engine run switch in "OFF" position.
2. Ignition switch not on.
3. Discharged battery or loose or corroded connections (solenoid chatters).

### Engine Turns Over But Does Not Start

1. Fuel tank empty.

2. Fuel valve turned off.
3. Fuel valve vacuum line disconnected.
4. Fuel valve or filter clogged.
5. Discharged battery or loose or broken battery terminal connections.
6. Fouled spark plugs.
7. Spark plug cables connections loose or in bad condition and shorting.
8. Loose or corroded wire or cable connection(s) at coil or battery.
9. Engine flooded with fuel as a result of over-enrichening.
10. Engine oil too heavy (winter operation).
11. Throttle held open when enrichener is used.
12. Fuel pump inoperative.

### Starts Hard

1. Spark plugs in bad condition or have improper gap or are partially fouled.
2. Spark plug cables in bad condition and leaking.
3. Battery nearly discharged.
4. Loose wire or cable connection(s) at one of the battery terminals or at coil.
5. Carburetor not adjusted correctly.
6. Engine oil too heavy (winter operation).
7. Ignition not timed properly. See dealer.
8. Fuel tank vent plugged or carburetor fuel line closed off,

restricting fuel flow.

9. Water or dirt in fuel system and carburetor.
10. On fuel injected models - not allowing fuel pump time to pressurize fuel lines.
11. Fuel pump inoperative.

### **Starts But Runs Irregularly or Misses**

1. Spark plugs in bad condition or partially fouled.
2. Spark plug cables in bad condition and leaking.
3. Spark plug gap too close or too wide.
4. Battery nearly discharged.
5. Damaged wire or loose connection at battery terminals or coils.
6. Intermittent short circuit due to damaged wire insulation.
7. Water or dirt in fuel system, filter, or carburetor.
8. Fuel vent system plugged. See dealer.
9. One or both injectors fouled.

### **A Spark Plug Fouls Repeatedly**

1. Excessive enricher use.
2. Fuel mixture too rich.
3. Incorrect spark plug.

### **Pre-ignition or Detonation (Knocks or Pings)**

1. Incorrect fuel.
2. Incorrect spark plug for the kind of service.

### **Overheats**

1. Insufficient oil supply or oil not circulating.
2. Heavy carbon deposit from "lugging" engine. See dealer.
3. Ignition timing retarded. See dealer.

### **Excessive Vibration**

1. Stabilizer links worn or loose.\* See dealer.
2. Engine isolation mounts loose.\* See dealer.
3. Rear fork pivot shaft nuts loose.\* See dealer.
4. Front engine mounting bolts loose.\* See dealer.
5. Engine to transmission mounting bolts loose.\* See dealer.
6. Broken frame. See dealer.
7. Front or rear chain/belt badly worn or links tight as a result of insufficient lubrication.
8. Wheels and/or tires damaged. See dealer.
9. Vehicle not properly aligned. See dealer.

\*If applicable.

## **LUBRICATION SYSTEM**

### **Oil Does Not Return to Oil Tank**

1. Oil tank empty.
2. Restricted oil lines or fittings. See dealer.
3. Restricted oil filter. See dealer.

## **Engine Leaks Oil From Cases, Push Rods, Hoses**

1. Loose parts. See dealer.
2. Imperfect seal at gaskets, push rod cover, washers, etc. See dealer.
3. Restricted oil return line to tank. See dealer.

## **ELECTRICAL SYSTEM**

### **Alternator Does Not Charge**

1. Module not grounded. See dealer.
  2. Engine ground wire loose or broken.\* See dealer.
  3. Loose or broken wires in charging circuit. See dealer.
- \*If applicable.

### **Alternator Charge Rate is Below Normal**

1. Weak battery.
2. Excessive use of add-on accessories.
3. Loose or corroded connections.
4. Extensive periods of idling or low speed riding.

## **CARBURETOR**

### **Carburetor Floods**

Excessive "pumping" of hand throttle grip.

## **TRANSMISSION**

### **Transmission Shifts Hard**

1. Bent shifter rod. See dealer.
2. Transmission shifting mechanism needs adjustment. See dealer.

### **Transmission Jumps Out of Gear**

1. Shifter rod improperly adjusted. See dealer.
2. Shifter forks (inside transmission) improperly adjusted. See dealer.
3. Worn shifter dogs in transmission. See dealer.

### **Clutch Slips**

1. Clutch controls improperly adjusted. See dealer.
2. Worn friction discs. See dealer.
3. Insufficient clutch spring tension. See dealer.

### **Clutch Drags or Does Not Release**

1. Clutch controls improperly adjusted. See dealer.
2. Insufficient clutch spring tension. See dealer.
3. Transmission case over-filled.
4. Clutch discs warped. See dealer.

### **Clutch Chatters**

Friction discs or steel discs worn or warped. See dealer.

## **BRAKES**

### **Brakes Do Not Hold Normally**

1. Master cylinder low on fluid. See dealer.
2. Brake line contains air bubbles. See dealer.
3. Master or wheel cylinder piston worn. See dealer.
4. Brake pads contaminated with grease or oil. See dealer.
5. Brake pads badly worn (1/16 in. minimum lining thickness). See dealer.
6. Brake disc badly worn or warped. See dealer.
7. Brake fades because of heat build up. Excessive braking or brake pads dragging. See dealer.
8. Brake drags. Insufficient hand lever free play. See dealer.

## OWNER'S IDENTIFICATION CARD

See Figure 50. A permanent Owner's Identification Card is issued to each Harley-Davidson new motorcycle owner when the completed warranty registration form is received at Harley-Davidson, Inc.

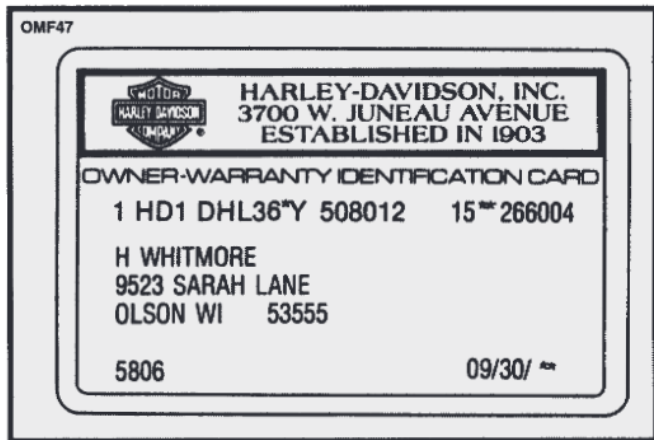


Figure 50. Owner's Warranty Identification Card

The Owner's Identification Card is a permanent record showing proof of your ownership and gives all of the information necessary for you and your dealer to simplify and expedite service and obtain parts and accessories.

Keep this card in your possession, since it is required by your Harley-Davidson dealer for any warranty service performed on your motorcycle.

If you have any questions regarding service or warranty, we recommend that you contact your Harley-Davidson dealer for service.

## WARRANTY AND MAINTENANCE

This Owner's Manual contains your new motorcycle warranty and a number of tear-out service coupons.

The approved service and maintenance procedures on each coupon and the mileage intervals cover items which are the owner's responsibility to have performed. All of the specified maintenance services must be performed to keep your warranty in force.

Bring this Owner's Manual with you when you visit your dealer at the specified mileages to have your motorcycle inspected and serviced. Have the owner record stubs dated and signed for required proof of service during the warranty period. The dealer records should be retained by the dealer, or owner, as a record of proper maintenance. Also keep other receipts covering any service or maintenance performed. These records should be transferred to each subsequent owner.

## WARNING

We caution you against the use of certain non-standard parts such as after-market and custom made extended front forks which may adversely affect performance and handling, and could cause an accident with possible injury to yourself or others. Removing or altering factory installed standard parts may also affect performance and cause injury. The use of any non-standard parts including mufflers may void your warranty according to terms of the warranty.

Harley-Davidson dealerships are independently owned and operated and may sell parts and accessories that are not manufactured or approved by Harley-Davidson. Therefore, you should understand that we are not and cannot be responsible for the quality, suitability, or safety of any non-Harley-Davidson part, accessory or design modification, including labor, which may be sold and/or installed by our dealers.

### KEEPING IT ALL HARLEY

To keep your Harley-Davidson motorcycle and its warranty intact, insist that your dealer uses only Genuine<sup>®</sup> replacement parts. Keep your Harley-Davidson completely Harley-Davidson. Exacting design and stringent testing ensure performance and warranty coverage. Insist on Genuine<sup>®</sup> parts for your genuine Harley-Davidson motorcycle.

Installing off-road or competition parts to enhance performance may void your new motorcycle warranty. See your dealer for details.

## CAUTION

It is possible to overload your motorcycle's charging system by adding too many electrical accessories. If your combined electrical accessories consume more electrical current than your vehicle's charging system can produce, the electrical consumption can discharge the battery and cause vehicle electrical system damage. **Ask your dealer for advice about the amount of current consumed by additional electrical accessories.**

## IMPORTANT

If you move from your present address, or sell your motorcycle, please fill out and mail the post card at the back of this manual. This is necessary in the event that the Company needs to contact the owner concerning information that could affect the safe operation of his motorcycle.

## **CALIFORNIA EVAPORATIVE EMISSION CONTROL**

All new 1995 Harley-Davidson motorcycles sold in the state of California are equipped with an evaporative emission control system. This system is designed to meet the CARB regulations in effect at the time of manufacture.

The system requires a small amount of maintenance. Periodic inspection is required to make sure hoses are properly routed, not kinked or blocked, and that all fittings are secure. Mounting hardware should also be checked periodically for tightness.

## **EPA NOISE REGULATIONS**

EPA noise regulations require that the following statements be included in the Owner's Manual.

**TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED:** Federal law prohibits the following acts or the causing thereof: (1) The removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use, or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW.

1. Replacing the muffler(s) and/or the entire exhaust system with parts not certified to be noise legal for street use.
2. Removing or modifying the muffler internal baffles in any way.
3. Replacing the air intake/cleaner assembly with one not certified to be noise legal for street use.
4. Modifying the air intake/cleaner assembly in such a way as to make the vehicle no longer noise legal for street use.

Harley-Davidson recommends that any and all noise related maintenance be done by an authorized Harley-Davidson dealer using genuine Harley-Davidson parts.

## **WARRANTY/SERVICE INFORMATION**

Your selling dealer is responsible for providing the warranty repair work on your motorcycle.

For normal service work or warranty work under the above conditions, you may obtain the name and location of your nearest U.S. Harley-Davidson dealer by calling 1-800-443-2153 (toll free), in any state except Alaska and Hawaii.



*NOTE*

*The number shown above is accessible only with a touch-tone phone.*

## **REPORTING SAFETY DEFECTS**

Required by the National Highway Traffic Safety Administration (NHTSA).

### **NHTSA STATEMENT:**

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Harley-Davidson.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Harley-Davidson.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800/424-9393 (or 366-0123 in Washington D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.

# HARLEY-DAVIDSON LIMITED WARRANTY

## (12 MONTHS/UNLIMITED MILEAGE)

*Harley-Davidson Warrants to the first retail purchaser and authorized transferees of our new 1995 model motorcycles/sidecars that any authorized Harley-Davidson Dealer will repair or replace without charge any parts (except tires, maintenance items and battery under certain conditions) found under normal use in the U.S.A. or Canada to be defective in factory materials or workmanship, and upon the following terms and conditions:*

### DURATION AND TRANSFER

1. The duration of this limited warranty is twelve months, measured from the date of initial retail purchase from an authorized Harley-Davidson Dealer.
2. Any unexpired portion of this limited warranty may be transferred, with written authorization, upon the resale of the motorcycle/sidecar during the warranty period. To obtain authorization, a transfer application must be filed with Harley-Davidson and the motorcycle/sidecar must pass inspection by one of our authorized Dealers. The customer is responsible for any charge incurred for work performed by the Dealer beyond the inspection procedure itself. (See your Owner's Manual for complete details.)

### OWNER OBLIGATIONS

1. To qualify for warranty protection, you and the selling Dealer must complete the Warranty Registration Form and return it to us within 10 days after delivery. We will then send you an Owner-Warranty Identification Card.
2. To obtain warranty service, return your motorcycle/sidecar at your expense within the warranty period to any authorized Dealer. You must be able to present your Owner-Warranty Identification Card and/or Owner's Manual upon our Dealer's request. Our Dealer should be able to provide warranty service during normal business hours and as soon as possible, depending upon the workload of the Dealer's service department and the availability of necessary parts.

### EXCLUSIONS

This warranty will not apply to any motorcycle/sidecar as follows:

1. Which has not been operated or maintained as specified in the Owner's Manual.
2. Which has been abused, altered outside of original factory specifications, improperly stored or used "off the highway", for racing or competition of any kind.
3. Which has had the odometer removed or tampered with.

### OTHER LIMITATIONS

This warranty does not cover:

1. Parts and labor for normal maintenance as recommended in the Owner's Manual, including such items as the following: lubrication, oil and filter change, fuel system cleaning, battery maintenance, engine tune-up, spark plugs, light bulbs, brake, clutch and chain/belt adjustment (including chain replacement).
2. Seats, saddlebags, paint, chrome, or trim deterioration caused by ordinary wear and tear, exposure or improper maintenance.

### IMPORTANT/READ CAREFULLY

1. Our Dealers are independently owned and operated and may sell other products. Because of this, HARLEY-DAVIDSON IS NOT RESPONSIBLE FOR THE SAFETY, QUALITY, OR SUITABILITY OF ANY NON-HARLEY-DAVIDSON PART, ACCESSORY OR DESIGN MODIFICATION INCLUDING LABOR WHICH MAY BE SOLD AND/OR INSTALLED BY OUR DEALERS.
2. THERE IS NO OTHER EXPRESS WARRANTY (OTHER THAN EMISSIONS AND NOISE WARRANTIES) ON THE MOTORCYCLE. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS IS LIMITED TO THE DURATION OF THIS WARRANTY.
3. TO THE FULLEST EXTENT ALLOWED BY LAW, HARLEY-DAVIDSON AND ITS DEALERS SHALL NOT BE LIABLE FOR LOSS OF USE, INCONVENIENCE, LOST TIME, COMMERCIAL LOSS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Harley-Davidson Motor Company  
**LIMITED WARRANTY TRANSFER APPLICATION**

(PLEASE PRINT)

VEHICLE IDENTIFICATION NUMBER

DEALERSHIP

NUMBER		
NAME		
ADDRESS		
CITY	STATE	ZIP

PURCHASER

FIRST	INITIAL	LAST
NAME		
ADDRESS		
CITY	STATE	ZIP

WARRANTY EXPIRATION DATE  
 WILL BE 12 MONTHS FROM INITIAL  
 RETAIL PURCHASE DATE

INSPECTION PERFORMED BY  
 TRANSFER DEALER ON:

M	D	YR
---	---	----

**WARRANTY TRANSFER INSTRUCTIONS**

To validate the warranty transfer, the following items **must** be complied with:

- The prior retail purchaser must provide proof that required scheduled maintenance services have been performed. In the event they have not, it is the responsibility of the purchaser to have the next scheduled maintenance service or any other required work, performed at the purchaser's expense.
- The vehicle must be inspected by an authorized Harley-Davidson Dealer to determine its condition. If any of the conditions, listed under Exclusions in the Limited Warranty exist, the Warranty is not transferable.
- The Limited Warranty Transfer Application must be completed and forwarded to Harley-Davidson Motor Company by the Dealer. The form must be received within 10 working days of the sale to the above referenced purchaser. Upon receipt of this form the purchaser will receive a Owner-Warranty Identification Card.

PURCHASER SIGNATURE

DATE

DEALER SIGNATURE

DATE

**HARLEY-DAVIDSON USE ONLY**  
**TRANSFER APPLICATION**  
**RECEIVED:**

Copy Distribution:

White Original - to Harley-Davidson Motor Company  
 Yellow - for Customer      Pink for Dealer

*(Warranty Transfer Applications are available from your Harley-Davidson Dealer).*

## HARLEY-DAVIDSON EMISSION CONTROL SYSTEM WARRANTY

The following warranty applies to the emission control system and is in addition to the LIMITED WARRANTY, and NOISE CONTROL SYSTEM WARRANTY.

Harley-Davidson Motor Company warrants to the first owner and each subsequent owner that his vehicle is designed and built so as to conform at the time of sale with applicable regulations of the U.S. Federal Environmental Protection Agency at the time of manufacture and that it is free from defects in materials and workmanship which cause his motorcycle not to meet U.S. Environmental Protection Agency Standards within 5 years or 18,641 miles (30,000 kilometers) whichever occurs first.

The warranty period shall begin on the date the motorcycle is delivered to the first retail purchaser or, if the motorcycle is placed in service as a demonstrator or company vehicle prior to sale at retail, on the date it is first placed in service.

### THE FOLLOWING ITEMS ARE NOT COVERED BY THE EMISSION CONTROL SYSTEM WARRANTY

1. Failures which arise as a result of misuse, alterations, accident or non-performance of maintenance as specified in the Owner's Manual.
2. The replacement of parts (such as spark plugs, fuel and oil filters, etc.) used in required maintenance.
3. Loss of time, inconvenience, loss of motorcycle use or other consequential damages.
4. Any motorcycle on which the odometer mileage has been changed so that the mileage cannot be determined.

### RECOMMENDATIONS FOR REQUIRED MAINTENANCE

IT IS RECOMMENDED THAT ANY EMISSION SYSTEM MAINTENANCE BE PERFORMED BY AN AUTHORIZED HARLEY-DAVIDSON DEALER USING GENUINE HARLEY-DAVIDSON REPLACEMENT PARTS. THE MAINTENANCE, REPLACEMENT OR REPAIR OF THE EMISSION CONTROL SYSTEM MAY BE PERFORMED BY ANY OTHER QUALIFIED SERVICE OUTLET OR INDIVIDUAL. NON-GENUINE PARTS MAY BE USED ONLY IF SUCH PARTS ARE CERTIFIED TO COMPLY WITH U.S. ENVIRONMENTAL PROTECTION AGENCY STANDARDS.

**Harley-Davidson Motor Company, P.O. Box 653 Milwaukee, Wisconsin 53201, U.S.A.**

## HARLEY-DAVIDSON NOISE CONTROL SYSTEM WARRANTY

The following warranty applies to the noise control system and is in addition to the LIMITED WARRANTY, and EMISSION CONTROL SYSTEM WARRANTY.

Harley-Davidson Motor Company warrants to the first owner and each subsequent owner that his vehicle is designed and built so as to conform at the time of sale with applicable regulations of the U.S. Environmental Protection Agency (as tested following F-76 Drive-By test procedure) at the time of manufacture and that it is free from defects in materials and workmanship which cause his motorcycle not to meet U.S. Environmental Protection Agency Standards within 1 year or 3,730 miles (6,000 kilometers) whichever occurs first.

The warranty period shall begin on the date the motorcycle is delivered to the first retail purchaser or, if the motorcycle is placed in service as a demonstrator or company vehicle prior to sale at retail, on the date it is first placed in service.

THE FOLLOWING ITEMS ARE NOT COVERED BY THE NOISE CONTROL SYSTEM WARRANTY

1. Failures which arise as a result of misuse, alterations, or accident as specified in the Owner's Manual.
2. Replacing, removing, or modifying any portion of the NOISE CONTROL SYSTEM (consisting of the exhaust system and air intake/cleaner assembly) with parts not certified to be noise legal for street use.
3. Loss of time, inconvenience, loss of motorcycle use or other consequential damages.
4. Any motorcycle on which the odometer mileage has been changed so that the mileage cannot be determined.

RECOMMENDATIONS FOR REQUIRED MAINTENANCE

IT IS RECOMMENDED THAT ANY NOISE SYSTEM MAINTENANCE BE PERFORMED BY AN AUTHORIZED HARLEY-DAVIDSON DEALER USING GENUINE HARLEY-DAVIDSON REPLACEMENT PARTS. THE MAINTENANCE, REPLACEMENT OR REPAIR OF THE NOISE CONTROL SYSTEM MAY BE PERFORMED BY ANY OTHER QUALIFIED SERVICE OUTLET OR INDIVIDUAL. NON-GENUINE PARTS MAY BE USED ONLY IF SUCH PARTS ARE CERTIFIED TO COMPLY WITH U.S. ENVIRONMENTAL PROTECTION AGENCY STANDARDS.

**Harley-Davidson Motor Company, P.O. Box 653 Milwaukee, Wisconsin 53201, U.S.A.**

## 500 MILE

(800 km)

### MAINTENANCE

\_\_\_\_\_

Date

\_\_\_\_\_

Mileage

\_\_\_\_\_

Dealer (or other) Signature

OWNER RECORD

## 500 MILE

(800 km)

### MAINTENANCE

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_

Owner's Signature

\_\_\_\_\_

VIN

Date \_\_\_\_\_ Mileage \_\_\_\_\_

DEALER RECORD

## 500 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug. Check/adjust primary chain.
- 4. Check clutch adjustment.
- 5. Change transmission lubricant and clean magnetic drain plug.
- 6. Check and adjust drive belt.
- 7. Lube the foot shift/brake lever bearings\*.
- 8. Check rear brake pedal adjustment.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable and hand lever.
- 13. Check, adjust operation of enricher.
- 14. Inspect fuel valve, lines and fittings for leaks.
- 15. Check tire pressure and inspect tread.
- 16. Check wheel spoke tightness.\*
- 17. Check battery electrolyte level and clean battery connections.
- 18. Check operation of all electrical equipment and switches.
- 19. Check cruise control disengage switch & other components\*.
- 20. Check shock absorbers.
- 21. Check rear fork pivot nut.\*
- 22. Check air suspension - pressure, operation and leakage.\*
- 23. Check stabilizer links\* and engine mounts.
- 24. Check tightness of all fasteners except engine head bolts.
- 25. Check engine idle speed adjustment.
- 26. Road test.

\*If applicable.

## 500 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Change primary chaincase lubricant and clean magnetic drain plug. Check/adjust primary chain.
- 4. Check clutch adjustment.
- 5. Change transmission lubricant and clean magnetic drain plug.
- 6. Check and adjust drive belt.
- 7. Lube the foot shift/brake lever bearings\*.
- 8. Check rear brake pedal adjustment.
- 9. Inspect brake pads and discs for wear.
- 10. Check brake fluid reservoir levels and condition.
- 11. Inspect oil lines and brake system for leaks.
- 12. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable and hand lever.
- 13. Check, adjust operation of enricher.
- 14. Inspect fuel valve, lines and fittings for leaks.
- 15. Check tire pressure and inspect tread.
- 16. Check wheel spoke tightness.\*
- 17. Check battery electrolyte level and clean battery connections.
- 18. Check operation of all electrical equipment and switches.
- 19. Check cruise control disengage switch & other components\*.
- 20. Check shock absorbers.
- 21. Check rear fork pivot nut.\*
- 22. Check air suspension - pressure, operation and leakage.\*
- 23. Check stabilizer links\* and engine mounts.
- 24. Check tightness of all fasteners except engine head bolts.
- 25. Check engine idle speed adjustment.
- 26. Road test.

\*If applicable.

**2500 MILE**  
(4000 km)  
**MAINTENANCE**

\_\_\_\_\_

Date

\_\_\_\_\_

Mileage

\_\_\_\_\_

Dealer (or other) Signature

OWNER RECORD

**2500 MILE**  
(4000 km)  
**MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_

Owner's Signature

\_\_\_\_\_

VIN

Date \_\_\_\_\_ Mileage \_\_\_\_\_

DEALER RECORD



## 2500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enrichener controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery fluid level and connections.
- 10. Check stabilizer links\* and engine mounts.
- 11. Road test.

\*If applicable.

## 2500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enrichener controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery fluid level and connections.
- 10. Check stabilizer links\* and engine mounts.
- 11. Road test.

\*If applicable.

**5000 MILE**  
(8000 km)  
**MAINTENANCE**

\_\_\_\_\_

**Date**

\_\_\_\_\_

**Mileage**

\_\_\_\_\_

**Dealer (or other) Signature**

**OWNER RECORD**

**5000 MILE**  
(8000 km)  
**MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_

**Owner's Signature**

\_\_\_\_\_

**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 5000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Clean tappet oil screen.\*
- 4. Change primary chaincase lubricant and clean magnetic drain plug. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the foot shift/brake lever bearings\* and speedometer cable\* .
- 9. Check rear brake pedal adjustment.
- 10. Inspect brake pads and discs for wear.
- 11. Check brake fluid reservoir levels and condition.
- 12. Inspect oil lines and brake system for leaks.
- 13. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable and hand lever, jiffy stand.
- 14. Check, adjust operation of enrichener.
- 15. Inspect fuel valve, lines and fittings for leaks.
- 16. Clean fuel tank filter screen.
- 17. Check tire pressure and inspect tread.
- 18. Check wheel spoke tightness.\*
- 19. Check front fork bearing adjustment.
- 20. Check operation of all electrical equipment and switches.
- 21. Check cruise control disengage switch & other components.\*
- 22. Check battery electrolyte level and clean battery connections.
- 23. Inspect spark plugs.
- 24. Check condition of rear shock absorbers.
- 25. Check air suspension - pressure, operation and leakage.\*
- 26. Check engine mounts.
- 27. Check tightness of all fasteners except engine head bolts.
- 28. Lubricate hinges, latches - fuel door, Tour-Pak, saddlebags\*
- 29. Check ignition timing and vacuum hose.
- 30. Check engine idle speed adjustment.
- 31. Road test.

\*If applicable.

## 5000 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Clean tappet oil screen.\*
- 4. Change primary chaincase lubricant and clean magnetic drain plug. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the foot shift/brake lever bearings\* and speedometer cable\* .
- 9. Check rear brake pedal adjustment.
- 10. Inspect brake pads and discs for wear.
- 11. Check brake fluid reservoir levels and condition.
- 12. Inspect oil lines and brake system for leaks.
- 13. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable and hand lever, jiffy stand.
- 14. Check, adjust operation of enrichener.
- 15. Inspect fuel valve, lines and fittings for leaks.
- 16. Clean fuel tank filter screen.
- 17. Check tire pressure and inspect tread.
- 18. Check wheel spoke tightness.\*
- 19. Check front fork bearing adjustment.
- 20. Check operation of all electrical equipment and switches.
- 21. Check cruise control disengage switch & other components.\*
- 22. Check battery electrolyte level and clean battery connections.
- 23. Inspect spark plugs.
- 24. Check condition of rear shock absorbers.
- 25. Check air suspension - pressure, operation and leakage.\*
- 26. Check engine mounts.
- 27. Check tightness of all fasteners except engine head bolts.
- 28. Lubricate hinges, latches - fuel door, Tour-Pak, saddlebags\*
- 29. Check ignition timing and vacuum hose.
- 30. Check engine idle speed adjustment.
- 31. Road test.

\*If applicable.

**7500 MILE**  
(12000 km)  
**MAINTENANCE**

---

**Date**

---

**Mileage**

---

**Dealer (or other) Signature**

**OWNER RECORD**

**7500 MILE**  
(12000 km)  
**MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

---

**Owner's Signature**

---

**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 7500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery fluid level and connections.
- 10. Check stabilizer links\* and engine mounts.
- 11. Road test.

\*If applicable.

## 7500 MILE MAINTENANCE

- 1. Inspect engine oil.
- 2. Inspect rear belt.
- 3. Inspect transmission lubricant.
- 4. Inspect brake pads and discs for wear.
- 5. Inspect fuel valve, lines and fittings for leaks.
- 6. Inspect tire pressure and inspect tread.
- 7. Inspect operation of throttle and enricher controls.
- 8. Inspect operation of all electrical equipment and switches.
- 9. Inspect battery fluid level and connections.
- 10. Check stabilizer links\* and engine mounts.
- 11. Road test.

\*If applicable.

**10,000 MILE**  
(16000 km)  
**MAINTENANCE**

\_\_\_\_\_

**Date**

\_\_\_\_\_

**Mileage**

\_\_\_\_\_

**Dealer (or other) Signature**

**OWNER RECORD**

**10,000 MILE**  
(16000 km)  
**MAINTENANCE**

You are authorized to perform the applicable maintenance and lubrication services listed on the back of this coupon. These services are to be performed at your regular rates and paid for by me, the owner. I also authorize you to road test this motorcycle for proper operation.

\_\_\_\_\_

**Owner's Signature**

\_\_\_\_\_

**VIN**

**Date** \_\_\_\_\_ **Mileage** \_\_\_\_\_

**DEALER RECORD**

## 7500 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Clean tappet oil screen.\*
- 4. Change primary chaincase lubricant and clean magnetic drain plug. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt.
- 8. Lube the foot shift/brake lever bearings\* and speedometer cable\* .
- 9. Check rear brake pedal adjustment.
- 10. Inspect brake pads and discs for wear.
- 11. Check brake fluid reservoir levels and condition.
- 12. Inspect oil lines and brake system for leaks.
- 13. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable and hand lever, jiffy stand.
- 14. Check, adjust operation of enricher.
- 15. Inspect fuel valve, lines and fittings for leaks.
- 16. Clean fuel tank filter screen.
- 17. Check operation of all electrical equipment and switches.
- 18. Check cruise control disengage switch & other components\*.
- 19. Check battery electrolyte level and clean battery connections.
- 20. Change spark plugs.
- 21. Check tire pressure and inspect tread.
- 22. Check wheel spoke tightness.\*
- 23. Repack wheel bearings with grease.
- 24. Inspect, adjust, repack front fork bearing.
- 25. Change front fork oil.\*
- 26. Repack rear fork bearings.\*
- 27. Adjust Springer rocker bearings.\*
- 28. Check condition of rear shock absorbers.
- 29. Check air suspension - pressure, operation and leakage.\*
- 30. Check stabilizer links\* and engine mounts.
- 31. Check tightness of all fasteners except engine head bolts.
- 32. Inspect Road King windshield bushings.
- 33. Lubricate hinges, latches - fuel door, Tour-Pak, saddlebags\*
- 34. Check ignition timing and vacuum hose.
- 35. Check engine idle speed adjustment.
- 36. Road test.

\*If applicable

## 7500 MILE MAINTENANCE

- 1. Change engine oil & oil filter.
- 2. Inspect air cleaner and service as required.
- 3. Clean tappet oil screen.\*
- 4. Change primary chaincase lubricant and clean magnetic drain plug. Check/adjust primary chain.
- 5. Check clutch adjustment.
- 6. Change transmission lubricant and clean the magnetic drain plug.
- 7. Check and adjust belt
- 8. Lube the foot shift/brake lever bearings\* and speedometer cable\* .
- 9. Check rear brake pedal adjustment.
- 10. Inspect brake pads and discs for wear.
- 11. Check brake fluid reservoir levels and condition.
- 12. Inspect oil lines and brake system for leaks.
- 13. Lubricate the following: front brake hand lever, throttle control cables, throttle, clutch control cable and hand lever, jiffy stand.
- 14. Check, adjust operation of enricher.
- 15. Inspect fuel valve, lines and fittings for leaks.
- 16. Clean fuel tank filter screen.
- 17. Check operation of all electrical equipment and switches.
- 18. Check cruise control disengage switch & other components\*.
- 19. Check battery electrolyte level and clean battery connections.
- 20. Change spark plugs.
- 21. Check tire pressure and inspect tread.
- 22. Check wheel spoke tightness.\*
- 23. Repack wheel bearings with grease.
- 24. Inspect, adjust, repack front fork bearing.
- 25. Change front fork oil.\*
- 26. Repack rear fork bearings.\*
- 27. Adjust Springer rocker bearings.\*
- 28. Check condition of rear shock absorbers.
- 29. Check air suspension - pressure, operation and leakage.\*
- 30. Check stabilizer links\* and engine mounts.
- 31. Check tightness of all fasteners except engine head bolts.
- 32. Inspect Road King windshield bushings.
- 33. Lubricate hinges, latches - fuel door, Tour-Pak, saddlebags\*
- 34. Check ignition timing and vacuum hose.
- 35. Check engine idle speed adjustment.
- 36. Road test.

\*If applicable

## SERVICE LITERATURE

For more detailed and complete technical and parts information the following publications are available (Fall of 1994) through your Harley-Davidson dealer. Order by part numbers below.

Publication.....	FLT Part No.	SOFTAIL Part No.	Dyna Glide Part No.	XLH Part No.
Service Manual.....	99483-95	99482-95	99481-95	99484-95
Parts Catalog.....	99450-95	99450-95	99450-95	99451-95
Wiring Diagrams & Electrical Troubleshooting Manual	99948-95	99948-95	99948-95	99948-95
FLHTCU-I Service and Parts Supplement.....	99462-95			

### International Service Literature

Publication:		
<b>Service Manual</b>	<b>1340cc Models</b>	
German .....	99485-95G	99484-95G
French.....	99485-95F	99484-95F
Italian .....	99485-95I	99484-95I
Spanish.....	99485-95S	99484-95S
<b>Owner's Manual</b>		
German .....	99465-95	
French.....	99465-95	
Italian .....	99465-95I	
Spanish.....	99465-95	



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## NOTES

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#### **PATENT NOTICE**

Harley-Davidson products are manufactured under one or more of the following patents: U.S. Patents - 2986162, 2987934, 2998809, 3116089, 3144631, 3144860, 3226994, 3229792, 3434887, 3559773, 3673359, 3709317, Des. 225, 626.

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